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ABSTRACT

Reported upon is an institute involving 87 participants representing leadership personnel in the field of learning disabilities, held December 3-6, 1969, in Tucson, Arizona. The institute's purpose was to upgrade the leadership personnel through exchange of information on issues in pre- and in-service training programs. Historical background, purposes, and organization of the institute are described. Proceedings presented include the committee reports of the seven groups into which participants were divided. Each working committee discussed specific roles and functions of teachers of the learning disabled, and implications for preparing such personnel. Also included are texts of the keynote speech by Leonard Lucito, in which he reviewed activities of the Bureau of Education for the Handicapped regarding teacher training for the future, and texts of the two main speeches by Richard Usher and Martin Dworkin. Usher's speech concerned teacher education in general, with emphasis of his research findings on teacher effectiveness and his point of view on future directions in teacher education, while Dworkin gave a philosopher's view of moral issues involved in changing children's learning behavior. Appended are reflections and comments by the institute's elder statesmen: William Cruickshank, Marianne Frostig, Newell C Kephart, Samuel A. Kirk, and Helmer Myklebust. (KW)

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FINAL REPORT

U. S. O. E. Contract No. OEG-0-9-121013-3021(031)

ADVANCED INSTITUTE FOR LEADERSHIP PERSONNEL
IN
LEARNING DISABILITIES

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BONUS

EC 032 413

Department of Special Education
University of Arizona
Unit on Learning Disabilities, Division of Training Programs
Bureau of Education for the Handicapped
U.S. Office of Education
1970

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FINAL REPORT

U. S. O. E. Contract

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We are extremely grateful, too, to the administration of the University of Arizona--especially Dr. F. Robert Paulsen, Dean of the College of Education, and Dr. George Leshin, Head of the Department of Special Education--for their backing and encouragement throughout the various phases of this project.

Noteworthy among the contributors to our Institute were Drs. Cruickshank, Frostig, Kephart, Kirk, and Myklebust, who were given special recognition as the "Elder Statesmen" of our field. Thanks to these gracious persons for adding their reflections and comments to our Institute and for editing these for inclusion in our report. We are also grateful for their permission to film their speeches for future use.

Gratitude is also tendered our main speakers, Dr. Leonard Lucito (now of Georgia State University), Dr. Richard Usher, and Professor Martin Dworkin, all of whom spent subsequent time editing their speeches for purposes of publishing in this report.

From many comments made by Institute participants, I feel certain everyone joins me in thanking the staff at the Arizona Inn, where the Institute meetings were held and where the participants were housed.

Finally, appreciation is extended to Dr. Mario Pascale (now Coordinator of the Unit on Learning Disabilities, Bureau of Education for the Handicapped) for reading the manuscript; to Mrs. Diane Gibson, Program Assistant in Learning Disabilities, for her assistance in the many details connected with such as Institute; and to our secretarial staff, Mrs. Rosalyn Cline, Miss Peggy Maraschiello and Miss Karol Keenan for their excellent services at the typewriter.

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TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS ii

CHAIRMEN OF WORKING COMMITTEES iv

"ELDER STATESMEN" v

SPEAKERS v

PARTICIPANTS vi

INTRODUCTION 1

HISTORICAL PERSPECTIVE 3

PURPOSES OF THE ADVANCED INSTITUTE 7

ORGANIZATION OF THE ADVANCED INSTITUTE 8

PROCEEDINGS OF THE ADVANCED INSTITUTE 9

- Keynote Speaker 9
- Main Speakers 10
- Committee Manuscripts 11
  - Group Report--Howard Adelman, Chairman 11
  - Group Report--James C. Chalfant, Chairman 23
  - Group Report--Eugene Ensminger, Chairman 37
  - Group Report--Jeanne McCarthy, Chairman 48
  - Group Report--Harold McGrady, Chairman 60
  - Group Report--Robert Ridgway, Chairman 75
  - Group Report--Margaret Scheffelin, Chairman 80

APPENDIX A REFLECTIONS AND COMMENTS BY THE ELDER STATESMEN 93

- William Cruickshank 94
- Marianne Frostig 98
- Newell C. Kephart 102
- Samuel A. Kirk 105
- Helmer Myklebust 112

APPENDIX B TEXTS OF SPEECHES 117

- Leonard Lucito 118
- Richard Usher 129
- Martin Dworkin 142

EPILOGUE 156

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Introduction

Eighty-seven participants representing leadership personnel in learning disabilities met in Tucson, Arizona, December 3-6, 1969. They were involved in working sessions devoted to the discussion of a) specific roles and functions of teachers of children with learning disabilities, and b) the implications for preparing such personnel. These sessions were made possible under a federally funded Advanced Institute for Leadership Personnel in Learning Disabilities, co-sponsored by the Bureau of Education for the Handicapped, Unit on Learning Disabilities; and the Department of Special Education, University of Arizona.

Previously, in a variety of professional meetings, many of these same participants had repeatedly discussed a) labeling and definition, and b) teacher training. A wide diversity of professional training and experiences has always been reflected in those who attended these meetings. Inherent in their diversity was a major communication problem due to differing terminology and concepts. Only through the continuing exchange of information and ideas (and sometimes even compromise) has the leadership personnel in learning disabilities been able to acquire common identification.

This Advanced Institute was but one of a number of professional meetings in the process of defining and planning for a specific group of children who cannot learn from regular instructional procedures. In earlier meetings, the Institute participants had already reached some consensus on labeling and definition. However, questions regarding teacher training were still unanswered. For this reason, the topic of this Advanced Institute was teacher training.

In an effort to elicit particular questions which the Institute participants had regarding teacher training, they were asked to complete this sentence during the early part of the Institute, "If there is one thing I want to learn from this Institute regarding training programs, it is..." Several of their responses follow:

> The priorities (including prerequisites) in the sequencing of courses in a program. This would include content as well as rationale. Secondly, I would like to be appraised of the trend and/or progress utilized by various states relevant to approving teachers/programs for state financial support--including diagnostic criteria, if any!
>
> The skills which are taught in practicum and how they are taught, how much time is spent by the trainee in teaching or diagnosing each skill, how supervision for this is mounted or managed, how the program for the child being taught is planned, and the basis for selecting the children taught.

To crystallize plans for a workable, creative (innovative, but profitable) and knowledgeable program for training of 'educators' in language/learning disabilities.

What all the participants think about the important new features that should be included in the learning disability teacher training program of the future, especially in doctoral programs.

How to articulate clearly the status of training in functional analysis and modification of behavior within the programs represented here.

More efficient methods of knowing individual student strengths/weaknesses (teaching and personal) early in the training year.

Place of the learning disability program in overall special education and teacher education programs and the type of person to be trained--teacher, resource person, clinician.

What innovative training approaches appear to show potential in terms of changing teaching style. A great problem in both pre-service and in-service training lies in learning to unlearn, especially in a graduate program that attracts practitioners in elementary education, other areas of special education, and B.A.'s in psychology.

How to adapt learning disability teacher training to facilities and needs available in the community as quickly and efficiently as possible --and how to set up a feedback system for continuous revision and reinforcement of the program.

Whether theory and research are being converted into practice. If so, what are the most effective means? Have we, at this point in history, accumulated enough knowledge in the field to make generalizations about the education of children with learning disabilities? Have any of the participants done research with micro-teaching or simulation to determine whether these techniques have merit for learning disabilities teachers. What should the universities be doing to help school administrators understand and organize programs in learning disabilities? Although we might all adhere to the same definition, there are many school programs which do not. This results in a confusing educational picture f the learning disabilities teacher.

What theoretical constructs (regarding diagnosis and remediation) are being used to facilitate training and how programs are coming to grips with individual differences among their students in terms of professional goals, learning capacities, and teaching styles by preparing them to meet difficult professional challenges. How are the universities assisting public schools in translating philosophy into practice, in accepting and using persons trained at various levels to fulfill various kinds of responsibilities. How are universities helping State Departments of Education to set certification standards to assure quality teaching for learning disability children.

How learning disability concepts (i.e. prescriptive teaching and diagnosis) may become a part of teacher training in popular education--both from a required course work and field work training point of view.

Historical Perspective

Historical perspective is required in order to view this Institute within the broader process of the development of the field of learning disabilities. The major national events which preceded this particular Advanced Institute were the following:

1. In 1963, a committee was organized by a number of interested governmental and private agencies for purposes of considering the problems of children whose overall intelligence appeared normal, but who exhibited deficiencies of mental processes which interfered with their ability to cope with some educational requirements. This committee recommended the establishment of three Task Forces. The sponsoring organizations were a) the National Institute of Neurological Diseases and Blindness, U.S. Department of Health, Education, and Welfare, b) the Easter Seal Research Foundation, National Society for Crippled Children and Adults, Inc.; c) the U.S. Office of Education, Department of Health, Education and Welfare; and d) the Neurological and Sensory Disease Control Program, Division of Chronic Diseases, U.S. Public Health Service.

Task Force I was concerned with terminology and definition. It recommended the label "minimal brain dysfunction" rather than "learning disability" because the disturbances in learning behavior which are attributable to a dysfunction of the nervous system extend further than the classroom learning situation. This Task Force defined children with minimal brain dysfunction as:

> ...children of near average, average, or above average general intelligence with certain learning and/or behavioral disabilities ranging from mild to severe, which are associated with deviations of

> function of the central nervous system. These deviations may manifest themselves by various combinations of impairment in perception, conceptualization, language, memory, and control of attention, impulse or motor function. These aberrations may arise from genetic variations, biochemical irregularities, perinatal brain insults or other illnesses or injuries sustained during the years which are critical for the development and maturation of the central nervous system, or from other unknown organic causes.

The report of Task Force I entitled, "Minimal Brain Dysfunction in Children" was published in 1966 (National Institute of Neurological Diseases and Blindness Monograph No.3, Public Health Service Publication No. 1415. U.S. Department of Health, Education and Welfare).

Task Force II reported on their analysis of the educational and medical services required for children with minimal brain dysfunction--learning disability. The report of Task Force II entitled, "Minimal Brain Dysfunction in Children, Educational, Medical and Health Related Services" was published in 1969 (Neurological and Sensory Disease Control Program Monograph, Public Health Service Publication No. 2015. U.S. Department of Health, Education, and Welfare).

Task Force III presented a review of scientific knowledge regarding central processing dysfunctions. Its report summarizes current facts and also points out gaps in scientific understanding. In the preface, Richard L. Masland describes this report as:

> ...a remarkable and comprehensive piece of work, highlighting above all the diversity of problems which are involved and the variety of scientific disciplines whose contributions will be required for their solution. A major problem has been the breadth of the topic and the massive literature which has been reviewed (the book includes 848 citations, but over 3,000 references are in the file). Wide gaps of knowledge exist in every area, and one is almost overwhelmed by the questions in need of elucidation.
>
> The final summary of research needs highlights the chaotic state of our current efforts in this field. We are dealing with a poorly defined population. The methods for early recognition of the child with learning difficulties are still to be worked out and tested. There is no standard or generally accepted systematic screening program through which every child could be tested for a learning disability. The characterization of the individual deficit is on a very superficial basis, with the emphasis dependent largely upon the biases of one or another special school of thought.

> Remedial methods are found to rest on varied and shaky hypotheses and have rarely been subjected to scientific evaluation even on an empirical basis.

Task Force III report entitled, "Central Processing Dysfunctions in Children: A Review of Research" was published in 1969 (National Institute of Neurological Diseases and Stroke Monograph No. 9).

2. A national parent group, the Association for Children with Learning Disabilities (ACLD), was organized in 1964 for the purpose of "advancing the education and general well-being of children with adequate intelligence who have learning disabilities arising from perceptual, conceptual or subtle coordinative problems sometimes accompanied by behavior difficulties." (1967 Fourth Annual Conference Report, Association for Children with Learning Disabilities, Academic Therapy Publications: San Rafael, California, p. iii). The annual conferences held by the Association have been popular with professional personnel. Beginning with the 1967 ACLD conference in New York, each year the directors from federally funded learning disability programs met to exchange information. In addition, they provided an answering service for those who wished information about program development and proposal writing.

3. In October, 1966, a meeting of the administrators of the 11 federally funded programs in learning disabilities was held at the University of Kansas, Lawrence, Kansas. The purpose of this meeting was to provide for an exchange of information regarding programs which were then in an experimental stage of development. The problems surrounding a label and definition were not yet resolved; however, a strong feeling of growing professional identification permeated this conference.

4. An Advanced Study Institute of 15 selected special educators was held at Northwestern University, Evanston, Illinois in the summer, 1967. This meeting was held for the purpose of the development of providing educational definitions of a learning disability and a multiple handicap. Multi-disciplinary definitions had been unsuccessful in the past and it was felt that special education needed its own definitions for these two emerging areas of exceptionality. The resulting definition for learning disability was the following:

> Learning disability refers to one or more significant deficits in essential learning processes requiring special education techniques for remediation.
>
> Children with learning disability generally demonstrate a discrepancy between expected and actual achievement in one or more areas, such as spoken, read, or written language, mathematics, and spatial orientation.
>
> The learning disability referred to is not primarily the result of sensory, motor, intellectual, or emotional handicap, or lack of opportunity to learn.
>
> Significant deficits are defined in terms of accepted diagnostic procedures in education and psychology.

> Essential learning processes are those currently referred to in behavioral science as involving perception, integration, and expression either verbal or nonverbal.
>
> Special education techniques for remediation refers to educational planning based on diagnostic procedures and results.

5. The National Advisory Committee on Handicapped Children reported to Congress in 1967 that one of the areas of special needs among the handicapped was children with learning disabilities. This group suggested that there's an urgent need for more extensive research on etiology, diagnosis, and remediation for this condition, and that there is an even more urgent need for trained personnel, particularly for personnel in special education. The definition suggested by the National Advisory Committee as a guideline for legislative purposes was the following:

> Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling, or in arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, emotional disturbance, or to environmental disadvantage.

This definition appears in a report by the National Advisory Committee on Handicapped Children sponsored by the Bureau of Education for the Handicapped, U.S. Office of Education, Washington, D.C., Sept. 28, 1967.

6. The Division for Children with Learning Disabilities (DCLD) was organized within the Council for Exceptional Children (CEC) in 1968. The purpose of this organization is educational, scientific, professional and particularly for promoting the education and general welfare of children having specific learning disabilities. The Division holds meetings and Crackerbarrel sessions on learning disabilities during the CEC convention. In addition to the general business meetings of the Division, a State and Province Committee was established to provide liaison between each state and province and the DCLD. At the present time, state and province divisions are being organized.

7. Learning disabilities, as a distinct area within clinical training programs and within special education in the public schools is of fairly recent origin. There are a small number of pioneers who have made significant contributions to the training of leaders and to the development of public school services in learning disabilities. At this Advanced Institute, five of these leaders appeared on the same platform in an open

meeting and shared with the audience their reflections and comments on their work in learning disabilities. These persons were Drs. William Cruickshank, Marianne Frostig, Newell C. Kephart, Samuel A. Kirk, and Helmer Myklebust. The historical perspective of the field as a whole, as well as the unique contributions of each "elder statesman," was reflected in these speeches. The transcriptions of these speeches appear in Appendix A.

Purposes of the Advanced Institute

The primary purpose of the Institute was to upgrade the leadership personnel in learning disabilities through the exchange of information regarding basic issues in pre- and in-service training programs.

The Institute participants were divided into seven working committees, with the common task of discussing first, specific roles and functions of the teachers in learning disabilities; and second, implications for preparing such personnel. The ideas brought to the Institute by the individual participants were reflected in committee manuscripts which appear later in this report. Each working committee was assigned a chairman who was charged with the responsibility of a) pre-planning for the group process, b) chairing the group sessions, and c) drafting a committee manuscript following their deliberations. The names of the chairmen are listed in the preliminary pages of this report.

Since so much effort and time had been spent on definition, this Institute was not designed to continue the debate on definition. The Northwestern Conference provided the professional working definition which could be accepted for this Institute. At this point in time, it seemed important to delineate job descriptions for personnel in learning disabilities--for teachers in learning disabilities, as well as for teacher trainers (the leadership personnel). From such specification of knowledges and skills, graduate programs can develop in a more rigorous fashion, hopefully, without destroying flexibility.

As a corollary to the primary purpose, the Institute honored the five "elder statesmen" previously mentioned with the intention to recognize their contributions to the development of the field of learning disabilities and to assure them of continuity in the field through the corporate rapprochement of this Institute's participants.

A secondary purpose of the Institute was to upgrade the leadership in learning disabilities through contact with notions regarding teaching and learning from disciplines other than special education. Currently, the field of learning disabilities has reached a crucial point in the development of minimum teacher standards and qualifications and in the synthesis of theoretical philosophies basic to learning disability programs. The existing conflicts surrounding these issues can best be handled by bringing into the field as many ideas from the outside as possible. Two main speakers, one a teacher educator and the other a philosopher, were invited to give presentations to the Institute participants. The speeches of Richard Usher, Colorado State University and Martin Dworkin, Teachers College, Columbia University, served as types of catalyzing agents which enhanced the participants' reactions to the exchange of information within their own committees. The transcription of these speeches appear in Appendix B.

Organization of the Advanced Institute

A Pre-Planning Advisory Committee met several months prior to the Institute for the purpose of advising the Institute director and coordinator on decisions to be made regarding Institute participants, speakers, and organization of working groups. The four Committee members were chosen by the field readers of the Institute proposal. Their names appear in the preliminary pages of this report.

The Pre-Planning Advisory Committee developed a philosophy that the Institute would be non-restrictive regarding the issues to be discussed by the participants, and the program was structured so that there would be no major speeches by any Institute participant. Since this was to be an Institute for leadership personnel, it was determined that the ideas of all participants would have equal visibility.

Specifically, the decisions of the Pre-Planning Advisory Committee were the following:

1. The list of participants to be invited. The majority of the participants (90%) were chosen from a list of university learning disability program directors which was provided by the U.S. Office of Education. The remaining 10% were chosen for the purpose of representing ideas from outside the program director group and provided external input. Selection was made from the following classifications: state directors of special education, local directors of learning disability programs, learning disability leaders, learning disability practicum supervisors, and clinicians. Geographical representation was also considered. The Institute participants are listed in the preliminary pages of this report.

2. The choice of the "elder statesmen" in the field of learning disabilities who were to be honored at a special ceremony on the last morning of the Institute.

3. The choice of major speakers from outside the field of learning disabilities who would provide ideas, the implications of which might be incorporated into the working committees' discussions.

4. The recommendation that each invited participant write a brief position paper expressing his/her views of the topics for discussion (specific roles and functions of the learning disabilities teacher, and implications for preparing such personnel). Since this was to be a working Institute, it was the opinion of the Committee that each participant should contribute to the planning as well as to the completed product. The requested papers would give the participants a chance to reflect on the issues in advance and would be guidelines for the formation of working committees.

The working committees were formed on the basis of the individual papers requested by the Pre-Planning Advisory Committee. These papers were grouped in two ways: a) by the major interest of the participant (as, for example, teacher training, research definition, job description) and b) by breadth of definition (ranging from a narrow definition taking in 3-5% of the school population to a broad spectrum of learning problems).

The groups were then devised to be as homogeneous as possible in their definition of the population.

All working committees were asked to submit through their chairmen a written report of their deliberations on the two assigned topics: a) roles and functions of the learning disability teacher, and b) implications for teacher training. Although there is a great deal of overlap in these documents, each committee's document reflects the major interest of its authors. This final report, therefore, will include each of these products.

5. The recommendation that special interest sessions be held in the evenings to make it possible for the participants to interact in discussion groups other than their working committees. The topics for these evening sessions were announced to the participants during the day. The choices included such discussions as: Practicum Organization and Operation, How to Write Federal Proposals, Doctoral Programs, and Theoretical Constructs in Teacher Training. Discussions were freewheeling and therefore are not reported in these proceedings.

Proceedings of the Advanced Institute

1. Keynote Speaker. In keeping with the philosophy of the Pre-Planning Advisory Committee that the proceedings of the Institute would be non-restrictive regarding the issues, the keynote speaker was from outside the field of learning disabilities. He was, however, an influential person in bureaucratic matters relating to all of the handicapping conditions, including learning disabilities. The keynote speaker was Dr. Leonard Lucito, Director, Division of Training Programs, Bureau of Education for the Handicapped, U.S. Office of Education, Department of Health, Education, and Welfare. A transcription of this speech appears in Appendix B.

In his keynote speech, Lucito brought the participants up to date on the Bureau's activities regarding teacher training for the future. He reported basically three types of activities: a) supplemental support to on-going training programs, b) development and evaluation of new approaches to recruitment and training (called special projects) and c) assistance in the excess cost of incorporating the new approaches from the special projects into the on-going programs.

Lucito also presented the results of a Task Force meeting which included outside consultants as well as some of his own staff. The Task Force was asked to list some objectives for the improvement of personnnel training programs which are being funded through the Bureau. Their answers follow: a) need for information gathering, analysis, and dissemination, b) need to relate the research to manpower development and training activities, c) need to develop conceptual and theoretical bases for training programs (one of the recommendations was the possibility that a center or several centers be funded by the federal program through additional legislation) d) need to develop some exemplary demonstration training programs and to provide funds for visitation programs, and e) need to provide opportunities for training staffs to update themselves. Lucito mentioned professional pressure in terms of the breakdown of the traditional categories, and said that the Interrelated Areas Unit in his Division is the vehicle through which such personnel training programs may be funded.

In addition, Lucito made some personal observations about what is going on in education as a whole and in the field of learning disabilities in particular. He suggests that we should be concerned with individual differences among teachers, each of whom should develop a style that suits him. For example, a doctoral program could specialize in training researchers; another program could specialize in teacher trainers; and a third could train administrators. At the same time, the doctoral candidate can be undergoing multi-disciplinary training in University Affiliated Facilities. How to transfer research into action calls for coordinating a number of multi-disciplinary resources.

Lucito feels that it is not necessary to answer the question, "Is learning disabilities a field?" Rather, the three questions with which he charged the Institute participants were the following: a) "Who are the children with learning disabilities?" b) "What is the set of skills and knowledges that professional personnel need in order to serve these children?" and c) "How do you organize such personnel?"

2. Main Speakers. In keeping with the secondary purpose of the Institute--to upgrade the leadership in learning disabilities through contact with disciplines other than special education--the two main speakers, Richard Usher and Martin Dworkin, were from general education and philosophy respectively. Brief summaries of their speeches follow.

The first speaker, Richard Usher, spoke about teacher education in general, with emphasis on his research findings on teacher effectiveness and his point of view regarding future direction in teacher education. He noted that results have been inconclusive with respect to distinguishing effective and ineffective professionals. Usher suggested that a reason for this might be that knowledge is considered to be synonymous with effective teaching. What the teacher is, how the teacher behaves, must be added to knowledge in order to "engage people in the process of learning."

Research on teacher "traits" is also discouraging, according to Usher. Similarly, the identification of effective methods of teaching produces conflicting results. Methods are closely related to what the people are like who use them, and not inherent in the methods themselves.

As a point of view, Usher stressed the importance of the teacher as a unique "instrument" in teacher effectiveness as being more valuable than the "right methods" or the "right information." "What we are is a combination of beliefs, feelings, meanings, values, commitments, skills." These qualities reflect themselves at any point in time in a spontaneous, instantaneous reaction. The focus needs to be on the development of "self" within the prospective teacher. What an individual teacher becomes is based largely on how the teacher feels about his/her own teaching effectiveness.

Usher recommends a three-phased approach to teacher education: a) exposure of ideas and information, b) continuous involvement in the field from the very beginning of a training program, and c) exploration and discovery of personal meaning, in a kind of small seminar group experience. These three phases would run simultaneously in an ideal teacher education program.

The second speaker, Martin Dworkin, gave a philosopher's view of the moral issues involved in changing children's learning behavior. Dworkin noted a fundamental tension between professional and political definitions of learning disabilities. His question was whether effort is being wasted in working with the individual child who deviates and Dworkin suggested that "priorities for effort and care are insane today." He proposed that perhaps the professional definition of deficits will have to be articulated in practice in opposition to the political definition which is in accordance to the demands of the public. How the profession interprets its responsibilities must be put before the public through persuasion and "visceral fortitude" often in opposition to political expediency. "The responsibilities of a profession set limits of what can or cannot be done in all conscience and humanity." The first responsibility of any profession must be to do no harm in the sense of indoctrination and second, to have a worthy purpose for the future of these children. Dworkin ended his speech with the recommendations that our profession should define its responsibilities and advertise them, in addition to carrying them out.

3. Committee Manuscripts. In keeping with the primary purpose of the Institute--to upgrade the leadership personnel in learning disabilities through the exchange of information regarding basic issues in pre- and inservice training programs--each committee chairman prepared a report of the working sessions of his/her committee. These manuscripts appear below in their entirety. Some overlap appears, but each report reflects the views of the members of each group.

GROUP REPORT--HOWARD ADELMAN, CHAIRMAN

Participants--Howard Adelman (Chairman), Sam Clements, Edith Grotberg, Charles R. Jones, Eleanore Kenny, Isabelle Liberman, James McCarthy, Dan Ringleheim, Eli Rubin, Robert Valett, Robert Westley; Annalyn Watt (Student Recorder).

This report represents a distillation of (1) the views set forth by the above-listed group members in their pre-Institute working papers and (2) the ideas derived over the two days of discussion in Tucson. The issues summarized from the pre-Institute papers reflect the large number of concerns which are currently confronting professionals who are responsible for training in the area of Learning Disabilities. The collaborative product of the two days discussion should allow others to profit from the group's interchange and also provides a concrete demonstration of the benefits which can accrue when a group of task-oriented professionals who share common concerns have the opportunity for a structured interchange.

I. SUMMARY OF MAJOR ISSUES AND SUB-ISSUES RAISED BY GROUP MEMBERS IN THEIR PRE-INSTITUTE PAPERS

The planned focus of the Institute was to discuss, sequentially, (1) the specific roles and functions of Learning Disability teachers, and (2) the implications for preparing such personnel. These are, of course, comprehensive areas for discussion, and therefore, the working papers solicited from each of the participants were found to be extremely useful in anticipating and facilitating the systematic exploration of key sub-issues. Specifically, the pre-Institute working papers were abstracted, and the summary of the major issues and sub-issues were mailed to the members of the group. In this way each group member had the opportunity to prepare for the Tucson discussions, and the chairman was able to guide the discussions appropriately.

The issues raised in the pre-Institute papers are worth including at this point for two reasons. For one, they provide a statement of current major concerns of professionals working in the area. Second, in a broader sense, these concerns reflect the current developmental level of training programs in the area of Learning Disabilities.

A. With reference to specific roles and functions of Learning Disability (LD) teachers; the major concern were as follows:

1. Without raising questions about the definition of Learning Disabilities, the basic question on the minds of some of the participants was--How heterogeneous is the population of children with learning problems which the LD teacher does and should serve? (The point was made that LD teachers currently are called upon to work with a wide range of children with learning problems.) A related issue is--Do we train the LD teacher (a) with primary reference to the roles and functions implied by accepted definitions, concepts, theories, biases, beliefs, i.e., the "conceptual child" or (b) with primary reference to the actual children she will be called upon to service? (Or are these compatible reference points?)

2. Another basic sub-issue raised was--Should we be training a specialist (a) to teach learning disabled children directly and/or (b) to teach regular classroom teachers how to teach learning disabled children? This question, of course, is closely related to the issue of whether the learning disabled child should be enrolled in special classes or should remain in the regular classroom.

3. Most participants were in agreement as to the major areas of knowledge which the LD teacher would need to master in order to perform her functions optimally. (These are enumerated further on.) It was noted, however, that the acquisition of all this general and specialized knowledge would entail more time than any teacher training institution has been able or willing to initiate. Therefore, the issue was raised as to whether we would use this conference to engage in verbal fantasizing or whether we might, more practically, attempt to isolate the areas of competency deemed minimal and necessary for LD teachers at this point in time.

(In this connection, each participant was urged to make at least a cursory job-analysis of what LD teachers in his or her locale currently must be able to do in order to successfully remediate the types of learning problems she finds in her classroom.)

A corollary of this issue which was raised is--How do the competencies which the LD teacher needs differ, in practice, from those needed by teachers who work with normal children or children grouped under other special education labels (e.g., emotionally disturbed)?

4. The issue of the LD teacher's role and function with regard to prevention of school failure was raised in different ways. With the recognition that current instructional procedures used in regular classrooms contribute to (and cause?) many learning problems, some feel that the LD teacher must be equipped to help correct these deficiencies in the educational system. In this connection, one implied issue was--In addition to the teachers we already train, shouldn't [illegible] place greater emphasis on training LD teachers who will focus on pre school and kindergarten levels in order to facilitate early identification and prevention?

5. Also raised were questions regarding the LD teacher's role and function with regard to (a) research and (b) the development and evaluation of materials.

B. With reference to implications for preparing such professionals:

Suggestions regarding content areas generally were not controversial. Most of the suggestions made have been made at previous meetings or in the literature. If the teacher-in-training were to cover all the areas, she would learn about human development and learning, assessment and instruction, educational systems, and about the nature and function of research; in addition, she would learn how to utilize other human resources effectively, e.g., other professionals in education, professionals from other disciplines, and paraprofessionals; finally, she would be involved in activities designed to help her develop the personal skills required for professional effectiveness. To learn these things, she would be involved in a variety of training experiences which can be categorized into four types of basic activities: (1) traditional academic programming (lectures, seminars, readings, and individual study in the area); (2) observation and discussion of demonstrations by skilled professionals in a variety of relevant settings; (3) individually supervised participation in practicum settings and in research activities; and (4) group experiences designed to allow for greater interchange among trainees and between trainees and faculty.

Obviously, the major problem, as indicated above, is that the suggestions are very inclusive. The issue is--What is a practical package and process? One participant stated that a good LD training program "may well demand a new and different model than the traditional approach. Perhaps one sponsored jointly by the Departments of Special and Regular Education, and in cooperation with other departments in the training institution, e.g., Department of Psychology; Language, Speech and Hearing; School of Medicine, etc." Another participant emphasized "First, we must make a more detailed analysis of the prerequisites and on-the-job skills which allow an individual to function successfully as a teacher concerned with learning disabilities. Second, we must establish a detailed, coordinated curriculum involving academic, observational and participatory experiences through which the teacher in training can proceed in a carefully patterned and sequenced fashion."

From the responses, then, the major sub-issues in this area seem to be covered by the following questions:

1. What is a good model for training in this area? (And how does it differ from the model which should be used by other areas of

special and general education?)

2. Does what we know about learning disabilities suggest certain changes (with regard to content and process) which should be made in the general teacher training program? (This is emphasized because what the teacher has learned in her general training determines what we must teach her in her special learning disability training.)

3. Defining our LD teacher-training programs as pre-service training in the LD area, what content should be included in this pre-service training and what should be deferred for in-service LD training? (Do we have formal in-service programs for the LD teachers we have already trained?)

4. How much of the training should focus on the conceptual and how much on the technical? How much should focus on general issues related to such areas as assessment and instruction and how much should focus on special issues related to the assessment and remediation of LD?

Before concluding this section, it may be well to note that some participants raised a number of theoretical issues regarding the body of knowledge focusing on children with learning disabilities. Clearly, these issues have major implications for what we teach to LD teachers. However, it was felt that a two day conference probably was not the place to attempt to resolve highly theoretical or speculative issues. Therefore, these issues were not included in the summary nor discussed at the Institute.

II. SUMMARY OF THE IDEAS DERIVED FROM THE GROUP'S DISCUSSION*

At the onset, it is well to note that the following summary cannot adequately reflect the dynamic nature of the process by which the ideas were shaped, nor can it reflect the many benefits which the group members have accrued and will continue to accrue as a result of their participation at the Institute. Nevertheless, this summary is a tangible and meaningful by-product of the Institute which should allow others to profit from our group's efforts.

As indicated, the summary of major issues and sub-issues allowed the participants time for pre-Institute reflection and preparation. Nevertheless, as often happens, it still took a good deal of the first working day to lay the groundwork which enabled us to proceed systematically on the second day.

On that first day of discussion, ideas and terms came bursting forth--"developmental sequencing, interaction of environment with the learner, individual differences, learning theories, diagnostic and prescriptive teaching, individualized instruction, continuous evaluation, research consumer," etc., etc. After this initial opportunity for a reiterating of views, some basic ground rules were formulated. Because of the varying interests and needs of the participants, it was agreed that the discussion should not become so theoretical as to ignore practical considerations. (We wanted to discuss what was desirable with becoming too unrealistic.) At the same time, however, we did not want to limit ourselves to discussing "practical" problems (e.g., type and number of Learning Disability teacher needed, credentialling and University requirements, how many hours should be devoted to practicum.* Thus, it was determined that the group would attempt to develop a broad, conceptual view of roles, functions, and training needs and, where possible, specify meaningful and realistic practical implications.

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*As will become apparent, all the issues and sub-issues raised in the pre-Institute papers could not be discussed in two days. However, most of the important issues were touched upon.

A. Roles and Functions of the Learning Disability Teacher

Before it was possible to focus successfully on a discussion of the roles and functions of the Learning Disability (LD) teacher, it was necessary to come to some agreement about the population of learning problem youngsters which such teachers actually serve. In this connection, there was ready agreement that there was little to be gained from arguing over definitions. In addition, there was agreement that the population of youngsters currently labeled as Learning Disabled is a heterogeneous group. Thus, discussion soon focused in on describing the nature of this hetogeneity and its implications for training.

As a basic premise, we began with the view that the causes of school learning problems are best thought about in the context of an interactional model. Thus, we viewed a youngster's learning problems as resulting not only from the characteristics of the child but also from the characteristics of the school situation in which he is enrolled. That is, the group members concurred (1) that not all youngsters currently labeled as Learning Disabled have internal disorders which cause the learning problem and (2) that the learning problems of those youngsters who do not have internal disorders are best understood as resulting from a discrepancy between the school's demands and the youngster's skills, behaviors, needs, and interests. More specifically, the group members found it comfortable to work within the framework of a hypothesis which suggests that the current Learning Disability population consists of three major subgroups of youngsters with learning problems. These subgroups were described as including "at one end of a continuum those youngsters who actually have major disorders interfering with learning and at the other end of the continuum those whose problem stems primarily from the deficiencies of the learning enviornment; the third group encompasses those youngsters with minor disorders who, under appropriate circumstances, are able to compensate for such disorders."

As a major implication of the above conceptualization, it was recognized that the instructional needs of these three subgroups of youngsters would not be the same. In particular, it was emphasized that the nature of a

*It should be noted that such practical problems were discussed in special interest groups which were held during the Institute.

youngster's disability and deficits would determine the appropriate level and type of instructional focus (see Figure 1.)*

With these views as background, it seemed reasonable to conceptualize the LD teacher's roles and functions in broad terms. Thus, it was concluded that regardless of the role assigned to her and the type of problem youngster with whom she might be confronted, the LD teacher would be involved in (1) assessment and (2) program planning and implementation.**

1. Assessment was conceptualized as a process which gives direction to the LD teacher's efforts to determine (1) on which level the instructional focus should be (again see Figure 1), (2) specifically what should be taught at that level, and (3) what out-of-the-classroom steps should be undertaken in the remediation (or prevention) of a learning problem. In this context, the LD teacher's function was seen as that of being able to employ and interpret relevant formal and informal assessment procedures and of being able to derive implications from assessments made by others.***

Specifically, three sets of skills were categorized.

a. Observational skills--The ability to systematically analyze a student's general behavior and academic functioning within the context of daily classroom performance, e.g., behavioral rating, diagnostic teaching, task analysis.

*Some of this discussion focused on ideas derived from an article by Adelman (In Journal of Learning Disabilities, February, 1970).

**At this point, it is important to note that there was recognition of the fact that it is not possible to provide all needed training during pre-service programs. (Pre-service training was defined as specialized LD training occuring prior to employment as a LD teacher.) Therefore, the training of an LD teacher was viewed as a never ending process, with a pre-service program focusing on the development of minimal competencies and an in-service program for continuing, systematically, to foster necessary professional growth. In this context, it was emphasized that there is a need to develop more effective and systematic in-service programs than are currently being utilized, i.e., more than the traditional type of workshops, institutes, and extension courses. It was further emphasized that minimal competencies would vary from one area of the country to another depending on what roles and functions had been assigned to the LD teacher. For example, in instances where the LD teacher is to be involved in consultative activities (e.g., as an itinerant or resource teacher), the special skills of a consultant would have to be taught during the pre-service program; however, where the LD teacher is restricted to a direct service role, instruction in consultative skills could be delayed until needed and then such instruction could be offered in the context of in-service training.

***The point was made that many school counselors, psychologists, and physicians report findings without clarifying the implications for school practices. Therefore, the LD teacher must be equipped to interpret some of these findings even though she may not have been taught how to administer particular assessment procedures e.g., intelligence tests. It was recognized, of course, that there are some procedures which are only appropriately interpreted by the professional who administered it.

		TYPES					
		Awareness and Attitudes		Behaviors and Skills		Content and Concepts	
		Self	Others	Self	Others	Self	Others
LEVELS	Basic School Subjects						
	Prerequisites to School Learning						
	Interfering Behaviors and/or Underlying Processes						

Figure 1. Levels and types of remedial instructional focus.

Howard S. Adelman, "Graduate Training in the 'Speciality' of Learning Disabilities: Some Thoughts," Journal of Learning Disabilities, No. 2, Volume 3 (February, 1970), 66-72.

b. Testing skills--The ability to employ both formal and informal structured procedures designed to systematically assess a youngster's strengths, weaknesses, and limitations with reference to his school learning problems.

c. Interpretative skills--The ability to evaluate the meaning of observational and test data (whether administered by the teacher or someone else) for program planning and implementation.

(It is clear, of course, that observational, "testing," and interpretative skills are taught and employed within the context of a conceptual framework of what is needed to remedy (and prevent) learning problems. The work of both Bloom and Hewett were mentioned as pertinent in the development of such a conceptual framework. In addition, the sequential and hierarchical teaching strategies discussed by Adelman have relevance here, as does the AAMD level system.)

2. Program planning and implementation was conceptualized as involving the effective and efficient utilization of available resources, specifically people and materials. In this context, the LD teacher's function was seen as that of being able to formulate and provide instructional activities at all three of the levels of instructional focus summarized in Figure 1, as well as being able to work with others in and out of the school in order to remedy (or prevent) a learning problem.

Specifically, four sets of overlapping skills were categorized.

a. Basic Instructional skills--The ability to personalize classroom instruction to allow for the wide range of developmental, motivational, and performance differences which exist in every classroom.

b. Curriculum skills--The ability to develop, select, adapt, apply, and evaluate the impact and role of methods and materials relevant to the development of curricular (academic) skills and sensory, perceptual, motoric, cognitive, language, social, and emotional functioning.

c. Classroom management skills--The ability to structure a classroom of students in a way which is compatible (does not conflict) with the fostering of each youngster's desire to learn and perform and the ability to detect current and potential behavior problems and correct, compensate for, and/or tolerate such deviancies.

d. Interpersonal skills--The ability to interact effectively with pertinent others inside and outside the school. (Note: For purposes of our discussion, the interpersonal interactions within the school system were seen as occurring on three levels, i.e., interactions between the LD teacher and (1) those who are in positions above her (e.g., administrators, supervisors,) (2) those who are in positions comparable to hers (counselors, consultants, other teachers), and (3) those who are in training or have para- or non-professional positions. The major interpersonal interactions outside the school system which are involved directly with remediation of a youngster's learning problem, of course, were seen as centering around family members and other professions (e.g., physicians, psychologists). In addition, however, it was recognized that special education teachers perhaps more than regular classroom teachers have occasion to interact with community action groups, politicians, etc., especially in those instances where LD teachers have moved away from direct service roles and are involved in consultative, training, and policy making functions.)

B. Implications for Training

The major components of training programs for LD teachers were categorized as (1) formal academic presentations and (2) practical experiences. It was emphasized that for maximum impact such components must be coordinated and integrated, i.e., there must be coordination and integration between academic presentations, between practical experiences, and between these two major components. And as has been noted, it was emphasized that training is a continuous process requiring integrated and coordinated pre- and in-service programs, with the pre-service devoted to the development of the minimal competencies required for success.

1. Formal academics--Clearly, more is involved in training professionals than simply teaching specific skills and behaviors. (It was agreed that the good LD teacher would need to be more than a technician.) Therefore, the academic content was conceived of not just in terms of skills, but as areas of knowledge which encompass skills and behaviors, and awareness of specific concepts and general content, and an overall conceptual framework.*

The areas of knowledge which were specified can be categorized as follows:

a. Assessment

b. Instructional theories and practices (Note: Learning theories were included here. It was emphasized that learning theories would have more meaning to teachers if such theory were taught specifically with reference to their relevance to instruction.)

c. Human growth and development (Note: Here, it was emphasized that sensation and perception, movement, cognition, language, affect, and social behavior need to be understood with particular reference to their relevance to classroom instruction.)

d. Survey of contemporary thinking regarding exceptional children (Note: The need for a conceptual overview regarding the nature and implications of the similarities and differences within and between the various categories was emphasized.)

e. Methods and materials

f. Developmental reading

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*Some dissatisfaction was voiced regarding some of the procedures by which such knowledge is currently being communicated, e.g., regular, extension, and correspondence courses; seminars; workshops and institutes; readings; audiovisual presentations; apprenticeships. However, time was not available for an in-depth discussion of how these procedures could be used most effectively or for exploration of other alternatives.

g. Classroom management

h. Intrasystem ecology (Note: This label encompasses training focusing on the importance of and how to interact with and utilize others within the context of the school system.)

i. Extrasystem ecology (Note: This encompasses the importance of and how to interact with and utilize others outside the system, e.g., appropriate parental involvement both in the school and with reference to home teaching activities.)

j. Research and the classroom (Note: This encompasses (1) the importance of and how to be a knowledgeable research consumer, i.e., how to evaluate research findings which have implications for the classroom teacher, and (2) the importance of and how to initiate and/or participate in classroom research.)

The group made special note of the LD teacher's need for knowledge regarding (1) the importance of and procedures for evaluating her effectiveness and, in turn, (2) how to utilize this feedback (evaluative information) to enhance her effectiveness. (Since this ability can be encompassed under a number of the above areas, no separate category has been evolved. However, the importance of this ability can hardly be overemphasized.)

2. Practical experiences--Both observational and participatory experiences were seen as valuable and attainable through visitations to a variety of settings and through extended placement in a single setting. With reference to observation, it was emphasized that such observation should be structured so that the trainee knows how, where, when, why, who, and what to look for. With reference to participation, it was emphasized that the trainee should have the opportunity to observe master demonstrations and to have appropriate supervised practice in order to facilitate the acquisition of professional competency in each of the functions for which she is being trained (e.g., assessment, remediation, consultation, supervision, research).*

Since LD trainees come from varied backgrounds and since practical experiences occur at both pre- and in-service levels of training, it is clear that the nature of a trainee's practical experiences need to be determined by her prior training experiences and current training goals. The critical factors which can be varied in shaping such experiences were seen as including:

a. Type of handicapped population

b. Age level of handicapped population

c. Socio-economic status of handicapped population

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*In passing, it may be noted that the practicum was viewed as a critical place for screening out those individuals who prove to be professionally unfit.

d. Placement in regular and special (including clinical) classrooms

e. Placement in public and/or private school settings

f. Practice with individuals and/or groups

In recognition of the problem of coordinating and integrating such practical experiences with each other and with the formal academic presentations, it was suggested that an on-going seminar be maintained throughout pre-service training programs. The focus of such a seminar would be on dealing directly with any problems which trainees might have in assimilating and/or accommodating the academic and practical experiences.

C. Evaluation of Training Programs

The group participants recognized that all instructional activities must be evaluated both to determine their impact and to improve their quality. Therefore, despite the difficulty of initiating comprehensive and meaningful program evaluations, it was emphasized that some steps could be taken by almost all programs.

At the very least, it was suggested that descriptive data should be collected on the status of past trainees. (Are they still in direct service roles? Have they been assigned consultative, supervisory, or administrative roles? Are their current roles and functions related to the LD child, a different handicapped group, or a more general population?) In addition, subjective evaluations could be requested from former trainees after they have been employed for about a year. (Does she feel the program allowed her to acquire minimal competency and, in general, prepared her adequately for her current roles and functions?) From such data, some inferences can be made regarding the general impact of the program and the relevance of the training program components.

Another perspective of the training program's impact can be acquired by collecting objective and subjective data regarding a former trainee's impact on the children and schools with which she is involved. (Do her students' achievement scores show greater increases than in previous years? Has she helped to improve any of the school's programs and has she helped other teachers function more effectively?) Such data could be derived by testing the children directly and from rating scales and questionnaires, which can be solicited from colleagues, supervisors, and the teacher herself.

Currently, the findings of such program evaluations may be difficult to interpret because of the lack of standards upon which judgmental comparisons can be based. However, this is a problem which should be remedied as the result of the systematic collection and reporting of program evaluation data.

D. Some Later Reflections

At the ACLD convention in Philadelphia (Feb., 1970), the chairman had the opportunity to present this group's report to a session attended by concerned professionals and parents. On the whole, the preceding summary was well received. However, as always, the "Yes--but" phenomenon was evident during the question and answer period.

(Some readers may not recognize the "Yes--but" phenomenon by that name, but almost everyone will have experienced it for it is very common in professional circles. For instance, this phenomenon frequently occurs after a professional "expert" or consultant suggests changes to a teacher with reference to her classroom program, e.g., after such a presentation, a typical response is:

"Yes (pause), but--that only works in small groups. I have 25 (30, 35, 40) students in my class."
or, "Yes (pause), but--my principal would never let me do that."
or, "Yes (pause), but--where am I supposed to get the time to do all that?"
or, occasionally, someone comes up with that real killer, "Yes (pause), but--I've tried that and it doesn't work in my class.")

Since there were some "Yes--buts", it seems likely that some of the readers of the preceding report will have some of the same reactions, and therefore, the following responses may be helpful. The responsibility for what follows rests with the chairman, although hopefully the responses reflect the tenor of the group's thinking.

1. In response to "Yes--but how can you teach all these areas of knowledge in a brief training program?", the answer is "You can't and shouldn't try." All we had time to discuss at Tucson were the areas of knowledge we felt would allow for a truly knowledgeable and effective professional LD teacher. The next task needed is to determine what aspects of these areas constitute the minimal competencies which should be acquired prior to employment as a LD teacher and what competencies should be acquired, ultimately, so that LD teachers can achieve a high level of professionalism. Then, after that task is accomplished, attention needs to be devoted to the question of how pre- and in-service training can best be achieved, i.e., how to improve the process of training. A critical problem obviously is the fact that we are currently turning out teachers (both general and special education teachers) who do have only minimal competencies, and we do not have in-service programs which are designed to develop, systematically, the additional knowledge which is needed for achieving high standards of professionalism.

2. In response to "Yes--but what did the group advocate which is so different from what a regular teacher needs to know?", the answer is "probably not much." However, in practice, we recognize that regular classroom teachers have not been taught how to effectively teach children with learning problems. That is, in her general education training program, she has acquired only certain minimal competencies for teaching children, and thus in the LD pre-service training program, emphasis must be on expanding (building upon) her previous training to develop the minimal competencies necessary for teaching children with learning problems. In addition, as stated above, we have tried to emphasize the need for in-service programs which are designed with an awareness of where the pre-service LD program terminates so that training to professional standards can be achieved systematically, rather than by chance as so frequently happens at present.

3. In response to "Yes--but what about our needs today?", the answer is that our group felt that what we were doing would be of immediate help, but more importantly, we felt that many individuals and groups are focusing on meeting daily demands and that there is a definite need for undertaking the task of thinking ahead. Thus, we have made a beginning by formulating a broad conceptualization of the roles and functions and implications for training. To our knowledge, such a conceptualization has not been set forth in print previously. We hope that others will build on what we have done (1) by analyzing what aspects of the areas specified above are needed for minimal competency and (2) by exploring more effective models than presently are being followed in accomplishing both pre- and in-service training. It seems clear that there must be planning for the future at the same time as the demands of the present are being met if the field is to grow to professional maturity.

GROUP REPORT--JAMES C. CHALFANT, CHAIRMAN

Participants--Robert Bradfield, James C. Chalfant (Chairman), Henry L. Gottwald, Helen J. Hadden, Vera Lee Hardin, Rob Huckins, Phoebe Lazarus, Donald Mahler, Gino Micheletti, Richard M. Parres, Gil Ragland, Vernon L. Simula, Susan S. Trout

During the past ten years, a great deal of interest has been generated with respect to children who have specific learning disabilities. Parent-teacher groups have provided much of the impetus toward the establishment of needed services. In response to this groundswell of interest and concern, state legislatures have enacted both permissive and mandatory laws which provide support monies for needed programs. At present, school administrators are seeking personnel with the competencies to help these children. Unfortunately, competent personnel are scarce. The consequence of this situation is that institutions of higher education must establish teacher preparation programs which are capable of meeting the demand for qualified personnel.

The purpose of this report is to highlight some of the current thinking regarding basic issues in preparing teachers to work with children who have specific learning disabilities. It should be noted that all the participants do not necessarily accept all of the views presented here. This report simply attempts to organize and report the various points of view which were generated by the participants.

How Are Personnel Needs Determined?

In a state-wide effort to establish personnel training programs in learning disabilities it is necessary to determine the need for personnel. This can be done through cooperative study and joint planning by public schools, institutions of higher education, and the state office of public instruction. Working committees, site visits, the gathering of prevalence data, and a careful census of trained teachers can help identify personnel needs.

It is important, also, to study the services and facilities which are already available in the state for screening and identification, diagnosis, educational planning, and referral. The administrative organization and operational procedures in a state form the framework within which specialists in learning disabilities must function. If a training program is to prepare teachers to work effectively within this framework, the institutions for higher education should consider both the present and future working environment of future teachers.

By studying the organizational and operational procedures for diagnostic and remedial procedures, many states have found that breakdowns sometimes exist between the diagnosis and the implementation of remedial programs. In some instances, psychologists do not have teaching experience or had received only minimal exposure to remedial procedures. Similarly, teachers sometimes know very little about test results or their interpretation. Whenever this situation exists, there is a gap between the interpretation of test scores and their incorporation into the teaching situation. A second problem is difficulty in attempting to obtain a meaningful diagnosis through formal tests alone.

Public schools often seem to lack a mechanism for a long range assessment, such as studying children in different learning situations over a period of time. Finally, there seems to be a glaring need for large numbers of teachers in the schools, who have both the competency and the willingness to sit down and teach children on an individual or small group basis.

As a result of observations such as these, it is possible for planning committees to arrive at certain conclusions about the kinds of personnel needed to provide services for children with specific learning disabilities. Differences of opinion may arise during periods of mutual exploration, discussion, and planning. Many of these problems may center around administrative issues or role-conflicts between professional groups. When deliberations breakdown because of these kinds of problems, it may be helpful to refocus attention on the educational needs of children and the specialized skills and competencies of different professional groups.

It may be necessary to redefine administrative structures or job descriptions within or between disciplines in order to provide urgently needed services to large numbers of children. Discussions of administrative alternatives, the modification of roles, or the creation of new job descriptions will probably create anxiety and defensive reactions on the part of some individuals or groups at both local and state levels. Nevertheless, if the question exists, it should be pursued and explored thoroughly. If change is found to be necessary for providing services to children in a more efficient and effective manner, then modifications and changes should be made.

Redefinition of positions does not necessarily mean revolutionary role changes within a school system. Redefinition may be accomplished by small and subtle, but important role modifications. For example, the classroom teacher could make a greater contribution to the educational planning team by being made a member of the diagnostic team. This means that the teacher would be physically present during certain diagnostic sessions. Redefinition might be the skillful coordination of the service, of a speech correctionist, remedial reading teacher, and a learning disability teacher for the same child. If this kind of total push effort is desirable, and state regulations accidently prohibit this kind of inter-disciplinary effort, then it may be well to review state regulations for appropriate changes.

Major Questions With Respect To The Preparation Of Teachers

There are a number of salient questions concerning the details of preparing specialists in learning disabilities:

I. What are the roles of specialists in learning disabilities? What kinds of professional functions do they perform? What kinds of services do they provide?

II. What kinds of competencies do these roles require?

III. How can curricular content and practicum experiences be organized to provide specialists in learning disabilities with the necessary competencies?

IV. What kinds of experiences should be included in the curriculum? To what extent should each student's program include:

- a. lecture?
- b. laboratory?
- c. reading assignments?
- d. term paper?
- e. observations?
- f. supervised teaching?
- g. supervised testing?
- h. case report writing?
- i. precis of journal papers?
- j. field or desk research?
- k. preparing lesson plans?

V. How can programs be individualized for each student so maximum benefit can be obtained for all who are enrolled in the curriculum?

VI. What kinds of personnel, physical plant, and equipment are needed to support teacher preparation programs in learning disabilities in institutions of higher education?

VII. How does one develop criteria for determining whether or not each student teacher has achieved the standard level of performance?

VIII. How are the resources mobilized within a single university or between several universities to establish quality teacher preparation programs?

IX. What in-service training models seem to have promise for upgrading the competencies of teachers in the field? How can state offices of education, institutions of higher learning, medical centers, private agencies, and public schools collaborate to develop and support in-service training programs?

X. What is the role of local, state and federal support for providing pre-service and in-service training?

XI. What are the criteria and rationale for selection and admission of students into a teacher preparation program in learning disabilities?

It should be noted, however, that it will not be possible to discuss all these questions in depth at this time. This chapter will present the thinking on those questions which were discussed by our group.

What Are The Professional Roles?

Assuming the need for personnel has been determined, it is very important for institutions of higher education to develop a clear concept of the kind of personnel to be trained. The answers to all other questions about program and curriculum development depend upon how this first question is answered.

One approach to describing the kinds of professional roles performed by specialists in learning disabilities is to examine the kinds of services needed to help the target population, and the kinds of agencies which are presently serving these children. Other important considerations concerning role function are the availability of supportive personnel and facilities, population sparsity, and geographic factors such as distance or mountain ranges which affect accessibility to a population. Most important are the skills and competencies the specialist in learning disabilities brings to the child. Chief among these are competency in a) differential diagnosis and assessment through informal procedures and standardized tests, b) remedial planning, and c) implementation.

Figure 1 is an attempt to illustrate some of the many and varied roles which may be found in the field of learning disabilities. It is not possible to describe the universe of professional roles here. Figure 1 represents some of the major roles which are currently being filled by personnel trained at the remedial level.

Learning disabilities personnel are working in a number of service agencies. Among these are the public school, specialized private schools, hospitals and clinics.

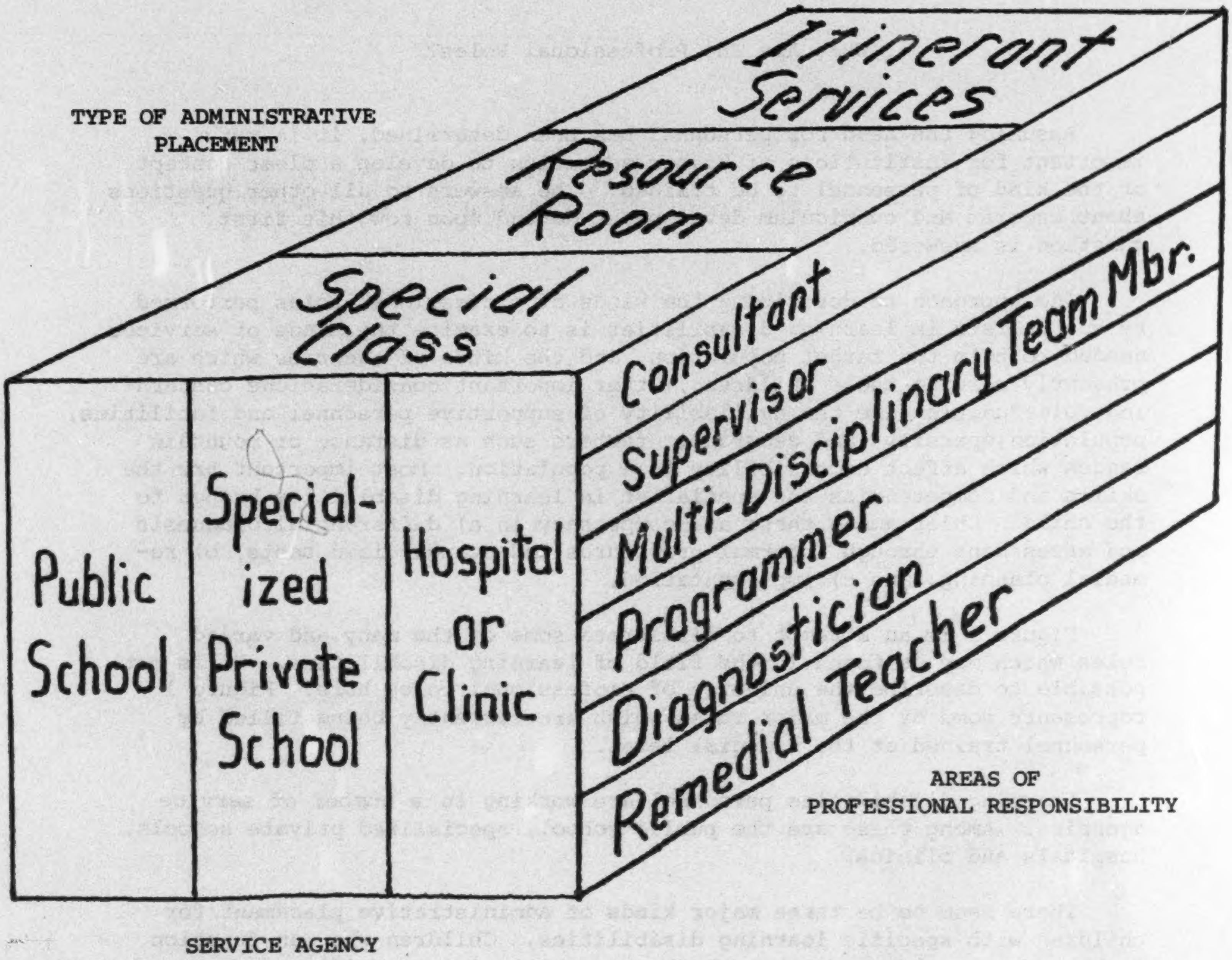
There seem to be three major kinds of administrative placement for children with specific learning disabilities. Children who can function in the regular classroom, but who have problems in a specific area may receive individualized or small group instruction from an itinerant teacher for twenty minutes to an hour each day. If the problem is more severe and the child needs more help, he might spend two to three hours per day in a resource room. When the child is unable to function in a regular classroom, he may be placed in a special class.

Professionals working in the area of learning disabilities may be assigned a number of professional responsibilities. Among these are: a) supervision; b) diagnostic work; c) programming or selecting and formulating instructional procedures or prescriptions for children; d) remedial teaching; e) membership on an interdisciplinary team; and f) consultantship. Job labels have different meaning for different persons, but it is important to note that the job descriptions of personnel in learning

Figure 1.

PROFESSIONAL ROLES
FOR
SPECIALISTS IN LEARNING DISABILITIES

(MASTER'S LEVEL)


TYPE OF ADMINISTRATIVE PLACEMENT
Itinerant Services
Resource Room
Special Class
Public School
Specialized Private School
Hospital or Clinic
Consultant
Supervisor
Multi-Disciplinary Team Mbr.
Programmer
Diagnostician
Remedial Teacher
AREAS OF PROFESSIONAL RESPONSIBILITY
SERVICE AGENCY

disabilities are usually made up of various combinations of the above responsibility areas.

What Are The Levels Of Teacher Preparation?

There are several levels of training in which each higher level represents an increased degree of competency and responsibility. The first level of teacher preparation might be that of the para-professional or teacher's-aide. There are many instructional tasks which do not require master's degrees or even bachelor's degrees. It is not realistic to think in terms of meeting the teacher shortage in terms of degree graduates. It is possible, however, to prepare large numbers of teacher's-aides by means of in-service training programs. The teacher's-aides would be trained to perform simple but necessary instructional tasks under the supervision of a highly trained specialist.

A second level of teacher preparation might be the bachelor's degree level. At present most teacher preparation programs in learning disabilities are at the master's degree level. This may be due to the belief that teachers should learn about normal children and have experience teaching them before attempting to teach children with learning disorders. There may be certain limited functions a graduate with a bachelor's degree could perform if the role were structured clearly and supervision provided. The effectiveness of such models should be developed and studied in order to determine their efficacy.

A third level of teacher preparation is the master's degree program. Training programs at the master's level are organized to train remedial teachers to serve in the public schools as tutors, teachers of small groups or special classes of children, master teachers in demonstration programs, and remedial teachers in clinical settings. The eight or ten unit master's degree program represents the minimum basic core for preparing remedial teachers and will require a full academic year and/or one summer session for completion. Emphasis is placed on implementing remedial programs through the interpretation of test results, ongoing educational assessment within the classroom and tutorial setting, and remedial teaching.

A fourth level of teacher preparation is the advanced certificate program designed to train diagnostic-teachers who will supervise the educational planning for the diagnosis and remediation of learning disorders. The diagnostic-teacher is trained to a) assist and supplement the school psychologist in evaluating learning problems; b) plan educational programs for individual children; c) do remedial work; d) function as supervisor and consultant for other teachers; and e) conduct in-service training programs for school personnel. In addition to training in diagnostic and remedial procedures, practicum experiences also include opportunities to plan remedial programs, supervise master's level students, and consult with public schools which are involved in the process of developing services for children with learning disabilities.

What Kinds Of Teacher Competencies Are Required?

One way to describe the various functions of the learning disabilities specialist is to view the teacher as a processor of information in her interaction with children. It appears that the competencies shared by educational personnel in learning disabilities can be considered under the following categories:

I. The teacher as observer:
  A. is able to identify significant behaviors
  B. is able to select and study specific behaviors relevant to child's problem

II. The teacher as recorder:
  A. is able to use an observation schedule to record observations of normal and deviant behavior
  B. is able to record 10-minute samplings efficiently, so that any student can translate findings for analysis
  C. is able to apply a behavior analysis technique to determine tentative hypotheses of developmental levels of child

III. The teacher as analyzer:
  A. is able to compile a summary of behavioral and cognitive aspects of a child's behavior from observations and records (description)
  B. is able to set up a profile of these competencies
  C. is able to analyze tasks
  D. is able to analyze medium (procedures and materials for instruction, etc.)

IV. The teacher as transducer:
  A. is able to participate in interdisciplinary conferences and interpret own findings to others
  B. is able to assimilate into own analysis information and observations from other disciplines
  C. is able to synthesize this feedback and amend own analysis

V. The teacher as transcoder:
  A. is able to set up tentative objectives for instruction of child regarding short-term goals and long-term goals
  B. is able to describe terminal behavior desired for short-term components
  C. is able to make competent decisions on modes of instruction to attain goals

VI. The teacher as transmitter:
  A. is able to set up physical environment for effective instruction
  B. is able to communicate by appropriate verbal or non-verbal transaction
  C. is able to select and competently use method and medium in presentation of the concept or skill to be learned
  D. is able to instruct individuals, small groups (2-6) and large class groups
  E. is able to involve each child in instructional transaction

VII. The teacher as evaluator:
  A. is able to administer tests to refine hypotheses (formal and informal), group screening and individual tests
  B. is able to design informal tests for purpose of group or individual assessment of specific competencies
  C. is able to use "feedback" from all functions (I through VII) to recast any and all approaches
  D. is able to use media for self-study and self-criticism (e.g., tape recorder, film, videotape computer assistance, etc.)
  E. is able to share successes and failures in teaching--learning experiences during group evaluation with colleagues in allied disciplines

We have just received the various functions of the learning disabilities teacher as a processor of information. A second way of looking at function is to focus on the teacher competencies per se. After considering the scope of competencies listed below it is not surprising that most programs require a fifth or even a sixth year of teacher preparation:

I. Fundamental background for all teachers
  A. child development
  B. learning theory
  C. existing curricula
  D. basic teaching skills

II. Understanding of learning problems
  A. characteristics of atypical learning patterns
  B. causal factors contributing to learning failure

III. Administrative procedures for screening and identification

IV. Skills in assessment
  A. observation
    1. use observational tools to identify behavior which is inappropriate or inadequate for local educational environment (class, curriculum, etc.) and is leading or will lead to extended failure.
    2. examine patterns of performance/behavior for possible causes (mental retardation, emotional disturbance, learning disability, mismatched to teacher/curriculum, etc.).
    3. apply systematic approach to examining all possible contributing causes.
    4. consider questions:
      a) What are likely future consequences of past behavior if unchanged.
      b) What would we like future behavior to look like?

  B. selection and administration and scoring of standardized tests.
    1. actual work with tests and reading scales.
    2. actual or simulated work with real pupils who may have learning disabilities.
    3. observations of other students working with children (to compress for time factor).
  C. system of recording observations.

- D. system of analyzing and synthesizing of data.
- E. techniques for drawing conclusions.
- F. organizing conclusions for effective presentation and communication to others.

V. Educational planning
- A. translate data into recommendations.
- B. organize and modify existing curricula for maximal learning.
- C. program new procedures and materials for individualized instruction.

VI. Special teaching skills

VII. Evaluation
- A. ability to make rapid, continuous reviews and initiate changes in programming.
- B. recognize that a major reason for inappropriate performance of the pupil is often due to the failure of the school.

VIII. Communication with both parents and professionals
- A. conferences and staffings.
- B. written reports.

IX. Knowledge of local, state operating rules and regulations Introduction to legal provision for delivering services to exceptional children (administrative format, finances, teacher certification, housing, etc.) combined with the early exposure to actual observation of exceptional children programs. Emphasis on things as they are, not as they might or should be.

In summary, it should be noted that one of the most important competencies of the learning disabilities teacher is his skill in integrating observed behaviors and generating inferences about what those behaviors mean. Figure 2 is an attempt to graphically portray this integrative process.

What Should Constitute The Curriculum?

There seems to be a common curricular core consisting of assessment and measurement practices, remedial procedures, and practice teaching opportunities. This core is intended to provide the basic skills and competencies which are necessary to assess the nature of specific learning disorders and to prepare teachers to plan and execute remedial programs. There are a variety of ways in which institutions of higher education have organized the curriculum content. The number and focus of courses sometimes varies, but the core seems to be fairly consistent from one university to the next.

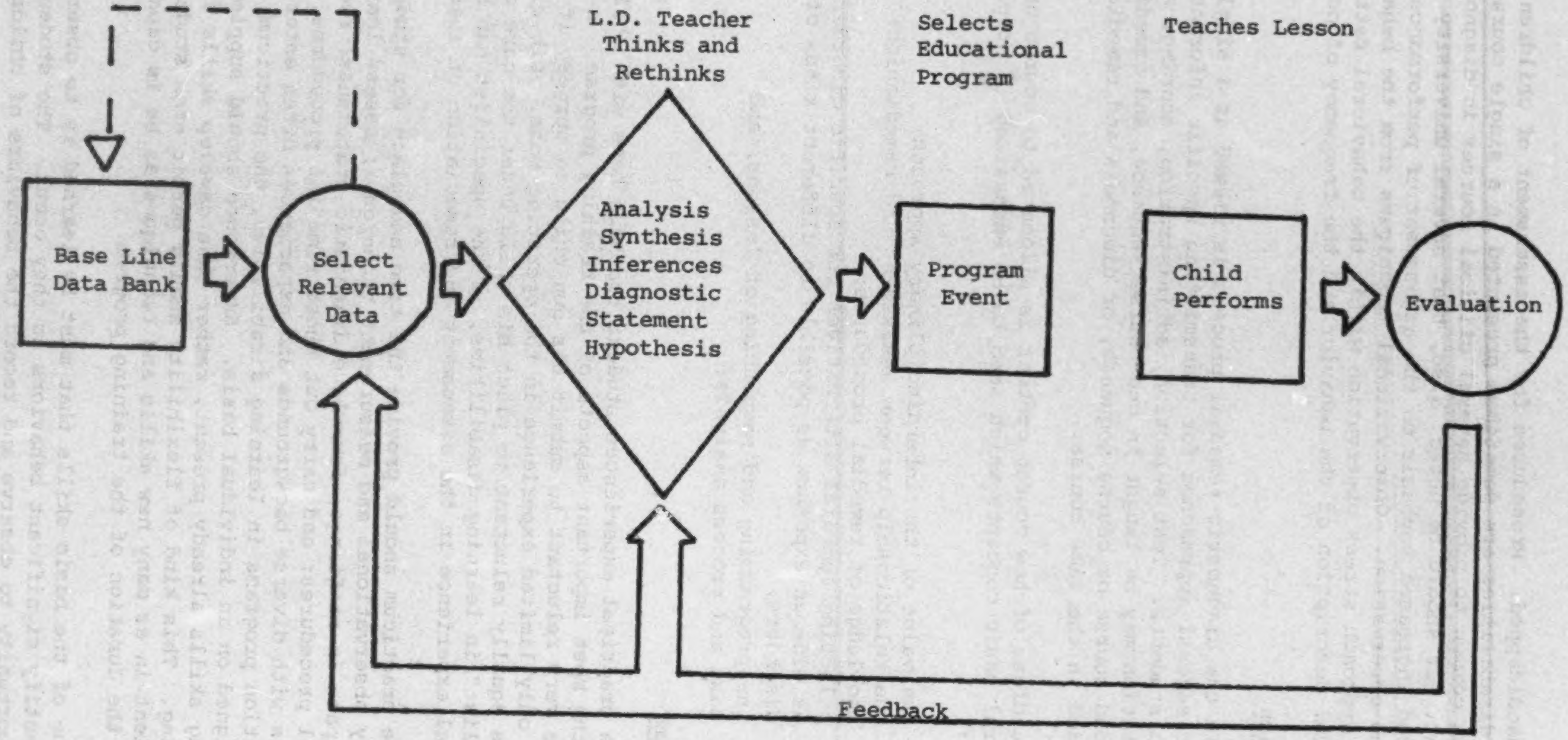
Educational Assessment

Curricula in educational assessment frequently includes a basic survey course in testing. Such a course usually covers observational techniques, measurement concepts, group tests, individual tests, and measurement problems in administering, scoring, and interpreting tests of children

Figure 2

AN ENACTIVE METHOD FOR DEVELOPING INDEPENDENT JUDGMENT

IN LEARNING DISABILITIES TEACHER TRAINEES


L.D. Teacher Thinks and Rethinks
Selects Educational Program
Teaches Lesson
Base Line Data Bank
Select Relevant Data
Analysis
Synthesis
Inferences
Diagnostic
Statement
Hypothesis
Program Event
Child Performs
Evaluation
Feedback

Teacher Trainer Input:
- a) What does this behavior mean?
- b) Why did you do that?
- c) What will you do now?
- d) Could you have accomplished your purpose in another way?

who are handicapped. Procedures for the assessment of children with learning disabilities are sometimes presented in a single course, but it is more common to provide several clinical courses in diagnosis or assessment. It should be noted, also, that several university programs have placed increased emphasis on the assessment of performance through structured observation. Observational techniques from the behavioral analysis approach stress observation within the behavioral setting and the careful description of the behavior and the frequency of occurrence.

Remediation

While the diagnostic-remedial process is viewed as a single entity, there are several approaches for transmitting specific information and skills to students. Test selection, administration, scoring, and interpretation may be taught in one course sequence, and remedial techniques in a second course or course sequence, or diagnosis and remediation might be included in the same course.

Regardless of how course content is allocated to course numbers, there are several basic concepts which seem to be emphasized in preparing remedial teachers:

a. the value of the interdisciplinary approach;
b. the relationship between assessment and remediation;
c. knowledge of remedial procedures;
d. selecting remedial alternatives for specific disorders;
e. as wide an exposure as possible to different kinds of learning disorders;
f. the programming and sequencing of lessons; and
g. task and process analysis.

Practicum

The practical experiences student teachers have with children constitute one of the most important aspects of the training program. A teacher would be very reluctant to submit his own child to surgery if the surgeon has had only limited experience in the operating room. Likewise, a surgeon would be equally reluctant to place his child under the care of a "specialist" in learning disabilities, if the specialist has had limited practical experience in the assessment and remediation of learning disorders.

The practicum should provide the time and place for student teachers to apply observational and measurement techniques; assess learning problems; participate in staffings; formulate diagnostic statements; recommend remedial procedures; and carry out these remedial procedures. Because students with diverse backgrounds and experiences often enter teacher preparation programs in learning disabilities, the practicum should probably be designed on an individual basis. Experience should supplement diagnostic-teaching skills already present, rather than develop skills from the beginning. This kind of flexibility should permit each student to become proficient in as many new skills and techniques as he is capable of learning during the duration of the training program.

One of the basic skills that must be learned is to observe accurately and identify significant behaviors as they occur. The student must have the opportunity to observe and record the behaviors of children. Student teachers might be asked, for example, to study behavior through structured observation in terms of product, process, and relate these behaviors to potential causal factors.

In addition to observing children, the student teacher should be given the opportunity to observe other teachers. He should be made aware of the different kinds of teaching strategies teachers employ when children make mistakes. Finally, experience in analyzing teacher-pupil interaction will help sensitize the student teacher to the many variables which can affect the teaching-learning situation.

Students should be exposed, first as observers and later as participants in diagnostic sessions. The student also benefits from participating in diagnostic-teaching sessions, which are designed to identify the nature and severity of specific learning disabilities, as well as their amenability to instruction through exploratory teaching probes in the areas of asset or deficit.

Practicum can be augmented by providing field experiences in public schools, clinics or hospitals. Some programs require a period of full time work in a school district. Their periods may range from two or three days to two or three months. University cooperation with local school districts enables students to become involved in screening programs, diagnosis, staffings and remedial planning.

Participation in in-service workshops, field experiences in screening programs, identification, selection, placement, and scheduling, familiarize students to many practical administrative problems involved in school programs. Field trips or internships to diagnostic-remedial clinics, and participation in university research projects also enriches the practicum.

Practica can be made more beneficial simply by increasing the amount of feedback to students with respect to their performance. Video-tape provides an excellent medium for evaluation. Instant play-back allows the teacher and the student to carefully study the teaching situation as many times as necessary. Controlled supervision is another valuable procedure. One way to structure the supervisory situation is to form small clinical teams consisting of a) the supervisor; b) the student teacher; and c) a student observer. The student teacher prepares the lesson plan and submits it to the supervisor for approval. The supervisor either approves the lesson plan or requests modifications, additions, or deletions. During the teaching session the student observer makes detailed behavioral observations, and records the child's responses. After the teaching session a critique is held, the student's teaching performance and observations are discussed, and the outline for the next lesson is developed.

Alternative Strategies for Preparing Teachers

There are a number of instructional strategies which seem to be used in the teacher preparation programs. One of the major questions confronting every program is "How should time allocations be made between these alternatives?" The amount of time for training is limited and each program must define their objectives. In other words, "What kinds of terminal behaviors are expected of our graduates?" When behavioral expectations have been set for the graduates, the alternative strategies should be evaluated in terms of effectiveness and efficiency. Then and only then should priorities be given to various instructional strategies. Examples of instructional stategies are outlined as follows:

1. Reading and writing
2. Lecture and discussion
3. Demonstration and observation
4. Video-taped presentation
5. Simulation activities
6. Micro teaching
7. Directed and supervised work with:
    a. one child;
    b. small groups;
    c. "normal" children;
    d. learning disabilities
    e. other handicapped children.
8. Field exercises
9. Strategies for training teachers to relate theory to practice
    a. In all courses, professors should require students to begin relating theory to practicalities, even in the introductory course. Provide students with practical exams, examples, case studies, "desk exercises." Always evaluating--this way of thinking should begin early in training program.
    b. Faculty works with a child and student observes process that the faculty member goes through to select materials and methods and what and how to constantly evaluate. Student realizes there are no pat answers and that every child is a new, different case with its own dimensions, with many unknowns in diagnosis and teaching.
    c. Student given child to teach when unprepared; returns to faculty and talks about what happened and what was observed. Faculty does not give suggestions or answers but tries to "pull it out" of the student--get the student to see and evaluate behavior by thinking aloud, verbalizing their impressions, realizing and learning from errors.
    d. Faculty goes side-by-side with the student in getting him to verbalize what he sees in a child and how this is related to theory (ies). Goal is for student to eventually be independent of faculty direction and communication.
    e. Use rats as means of teaching students how to observe behavior and interpret results of training. Train rats to go through a maze, observe their errors and successes, adapt by teaching him other ways (i.e., reducing complexity of maze) and evaluate success or failure of training program, research conclusions, and make hypotheses.
    f. Students make up an artificial language (or some skill) and teaches it to another person or to a group. Would stress how task could be presented, how adapted to different learners, how materials could be devised to teach a certain aspect of it, how to evaluate success and failure of task presentation.
    g. Give student a child (such as TMR, delinquent, C.P.) and allow him to explore how to gain rapport and adapt his uniqueness. Afterwards, student must critically analyze what happened in the situation and why and how he had to adapt.

h. Spend some time with students likened to an encounter group to make them aware of behavior and how many things it might mean.

What Factors Are Necessary For Initiating A Training Program?

There are several factors which should be considered before an institution of higher education makes the decision to initiate a training program in learning disabilities:

First, it is necessary that the university staff develop a clear concept of what learning disabilities are, the competencies needed to deal with these problems, and the ways in which specialists in learning disabilities would function in the schools.

Second, the administration of the college or university should have an awareness of the need to train personnel in learning disabilities.

Third, the university must be ready to provide ample financial support. A teacher-training program in learning disabilities is expensive. Because of the need for individualized instruction and supervision, the staff-student ratio should be low. Many university and college administrators are reluctant to invest heavily in a program for a comparatively small number of students.

Fourth, facilities to house the program must be provided. This would include office space, a parental waiting room, classrooms, testing-remedial rooms, observation rooms with one-way windows which are wired for sound, and space for a small instructional materials center. The availability of supplementary facilities such as hospitals, diagnostic centers, and public and private schools should also be considered.

Fifth, it may be necessary to make a rather large initial investment in diagnostic tests, remedial materials, and equipment such as language masters, tape recorders, and video-tape machines.

Sixth, the availability of a variety of books and journals in the library is an important factor.

Seventh, a training program in learning disabilities should have a multi-disciplinary emphasis. The quality of the program will probably be strengthened if the institution has strong departments of psychology, child development, educational psychology, and special education. Supportive staff from related departments can strengthen the program.

> Eighth, a pupil population base from which tutorial cases can be drawn must be available. A cooperative relationship with the public schools needs to be established for this purpose.

These factors suggest that the launching of a training program in learning disabilities will not be very successful, if it is not supported with competent staff, facilities, equipment, and materials.

Concluding Remarks

We are all aware of the rapid rate at which the field of learning disabilities is progressing. It is imperative that teacher training institutions keep pace with these changes. One way for training programs to do this is to keep in touch with their graduates in the field, who can be helpful in identifying the need for curricular adjustments. Teachers can report which training experiences they found valuable, those they did not find valuable, and identify the need for introducing new content and practicum. In order to benefit from this kind of feedback, it is important for colleges and universities to maintain flexibility for change. This will enable us to continue to increase the quality of our training programs, and further improve the effectiveness of tomorrow's teachers.

GROUP REPORT--EUGENE ENSMINGER, CHAIRMAN

Participants--Charles H. Bartlett, Dorothy DeBoer, Eugene Ensminger (Chairman),
Georgiana Foster, Betty Harrison, Offa Lou Jenkins,
Doris Johnson, John B. Junkala, Phillip Mann, Jerry Minskoff,
Alice Thompson, Dorothy Tyack, William R. Van Osdol

The charge of the working panel was to ". . . focus sequentially on (1) specific roles and functions of learning disability teachers, and (2) implications for preparing such personnel." The basic format of the working group discussions was divided into essentially three basic categories: (1) a discussion of the various roles, or at least titles of roles held by teachers training in the area of learning disabilities; (2) the basic skills requisite to functioning in the various learning disabilities specialist roles; and (3) describing sequences of experiences and content appropriate for developing specific skills and competencies of learning disabilities specialists. In the initial working session, a summary was presented of the questions posed in the position papers previously submitted by members of the working group. Only the questions relevant to the charge of the institute were summarized and are as follows:

I. Focus of Institute
   A. Specific roles and functions of learning disabilities teachers.
   B. Implications of roles and functions of learning disabilities specialists for developing a sequence of experiences for preparation.

II. Questions and Comments from Papers Submitted

A. Roles and functions of learning disabilities teachers.

1. Where do the learning disabilities specialists belong in the educational system and what are we to call them?
2. The following administrative arrangements and personnel were indicated: special class teachers, resource room teachers, itinerant teachers, learning disabilities teacher/consultants, and educational diagnosticians.
3. Are the above personnel (item 2) going to function independently, or should some coordination occur? Should a hierarchy of educational positions be developed?
4. What is the learning disabilities specialist's role in working with parents, other educational personnel, i.e. school psychologists, speech correctionists, occupational and physio-therapists, school social workers, counselors, administrators, teachers, and professionals from other disciplines?
5. Should the learning disabilities specialist be involved in in-service training of regular classroom teachers, administrators, etc.?
6. Need for feedback from teachers now in learning disabilities programs to specify the functions they serve and the problems they face, i.e. class load, involvement in pupil selection, staggered entrance into class, slow transition out of special class, choice of classroom (re: noise, etc.).

B. Teacher preparation (most of the papers were concerned with the particular skills to be developed by the learning disabilities teacher during the training period)

1. Should different training experiences be provided for teachers interested in a particular administrative plan, i.e. special class, resource room, etc.?
2. What educational experience should be provided in training a qualified learning disabilities specialist?
3. Should previous teaching experience be required before training as a learning disabilities teacher? If so, how much, and what kind?
4. Should a greater emphasis be placed on undergraduate teacher training in learning disabilities?
5. What types of practicum experiences should be required of students preparing as learning disabilities teachers? i.e. different educational settings, tutoring, testing, testing small or large groups, etc.
6. What procedures should be employed in supervising students? How should feedback be given to the practicum students (feed-back from supervising teacher, video-tape, observe someone else replicate the student's teaching mistakes while the student observes and records the mistakes, etc.)?
7. What basic competencies must the learning disabilities teacher have? Through what procedures should the teacher gain these competencies?
8. Should a universal set of basic certification requirements for learning disabilities teachers be established? If so, what are the limitations and assets of such a suggestion, i.e. misleading titles and content, etc.?

9. How can personnel in the training programs do a better job of disseminating information to one another, i.e. a printed organ, meetings, etc.?
10. What is the responsibility of University training personnel in the in-service education of regular classroom teachers?

Following some discussion regarding the great diversity of the field of learning disabilities and the richness of background brought to this field of special education, we finally decided that we would spend our time describing roles, or more specifically the titles of teachers serving children with learning disabilities with the following listing of teacher labels:

(1) self-contained classroom teacher
(2) resource teacher
(3) transitional teacher
(4) special education generalist, or learning disability generalist
(5) diagnostic teacher
(6) itinerant teacher
(7) psycho-educational specialist
(8) learning disability consultant
(9) clinical teacher
(10) master teacher

These titles were listed with the intent that each one would be discussed and that the specific functions served by that teacher would be delineated. It was hoped that as the functions served by these teachers were described, some pattern would evolve regarding the particular practices of functions of the different personnel. From the functions of learning disabilities teachers, it was thought that the skills needed could be identified and thus, specific plans could be made for implementing a training program. As might be expected, a great disparity existed within the working group as to how each one viewed the role of different personnel described. These differences were based largely on how the participants perceived the role and functions of learning disability teachers as they are performing within the participants' local communities. That is, a resource teacher might be for one person what an itinerant teacher or transitional teacher was to another. An extensive list of skills and functions were described and subsequently classified under four basic areas of competency: (1) diagnostic skills, (2) teaching techniques, (3) evaluation procedures, and (4) public relations. These skills and functions are as follows:

I. Diagnostic Skills
   1. Efficiently uses assessment data
   2. Uses formal and informal diagnostic observation
   3. Does case reporting
   4. Gathers educational developmental history

II. Teaching Techniques
   1. Utilization of curricular sequence:
      a. In all basic skills
      b. Ongoing evaluation and planning
      c. Broad understanding of methods and materials
   2. Uses behavioral management
   3. Prepares specialized materials

4. Applies psychological and psycho-educational data to educational planning
5. Individualizes instruction
6. Gains knowledge of and utilizes resources
7. Weighs readiness factors
8. Modifies classroom assignments to meet deficits
9. Enlists children to help learning disability children
10. Helps children understand their own and other's problems and strengths
11. Uses teacher aides effectively
12. Works individually with children
13. Enhances child's self-concept and aspiration level
14. Helps child establish realistic goals for himself
15. Sets realistic goals for child
16. Distinguishes between positive and aversive teacher behavior
17. Adjusts teaching strategies to child's unique pattern of development considering both strengths and weaknesses

III. Evaluation

1. Prepares progress reports
2. Helps child evaluate own performance realistically

IV. Public Relations

1. Counsels and conferences with parents
2. Uses interdisciplinary techniques
3. Enhances in-service public relations
4. Participates in pre-service with student teachers
5. Serves as liaison for articulation with other disciplines
6. Participates in making placement decisions
7. Builds close working relationships with special class teachers
8. Disseminates information at grade level (inter- and intra-)

Following the discussion on general functions of the learning disability specialist and the categorizing of these functions regardless of role label, the group deliberated on the ideas, information, and experiences to be provided the future learning disability specialist.

Two sub-groups were formed to deal with two components of the training program: (1) the exposure of teachers to ideas and information about child behavior, both normal, exceptional (all types) and learning disabilities; (2) and the types of child interaction needed to provide continuous involvement in field experiences while obtaining information and ideas (integration of the two components). This basic format followed the three-phase model provided by Dr. Richard Usher in his address. These three basic components were (1) exposure to ideas and information, (2) continuous involvement in the field, and (3) seminars in the discovery of personal meaning. The area of exposure of ideas and information and the types of information to be presented to the future learning disability specialist were as follows:

I. Exposure to Ideas and Information about:*

A. Normal Behaviors

1. Human growth and development

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*N.B. it should be stressed that this list is not synonymous with courses. That is, the emphasis is on knowledge about rather than courses in each area listed.

2. Curriculum sequence
3. Theories of personality
4. Theories of learning
5. Tests and measurement

B. Exceptional Behaviors
1. Types of and individual differences in exceptionalities (such as, hearing impaired, blind, etc.)
2. Learning and behavior of exceptional children
3. Behavior related to, or characteristics of, children with specific learning disabilities

C. Learning Disability Behaviors
1. Awareness of the types and nature of specific learning disabilities (re: academic areas, where is the "Breakdown?")

EXAMPLES OF TYPES OF BREAKDOWNS:

(a) modality functions
(b) intra-sensory - inter-sensory
(c) attentional factors
(d) input - output
(e) sensory-motor
(f) social perceptions
(g) memory
(h) orientation (time-space)
(i) verbal - non-verbal
(j) processing of information
(k) conceptualization
(l) mediational processes (e.g. inability to interpret incoming data for decision making to determine an appropriate course of action)
(m) language (structure and/or production)
(n) academic achievement

The basic outline for continuous involvement in field experiences and important considerations of those experiences are outlined below:

I. Identification of Dysfunction--Observation
A. Observation--awareness and selection of key behaviors
B. Base of understanding, e.g. causes of problems
C. Early involvement with real life situations--actual raw experiences
D. Intervention and planning
E. Systematic observation and data collection
F. Identification of the problem

II. Hypotheses Testing--Tutoring
A. Procedure for checking out hypothesis
B. Selection of materials for treatment
C. Development of procedures for presentation
D. Synthesis of observation and behaviors displayed during treatment

III. Program Objectives--Teaching Practicum
A. Sequence - procedures
B. Continuous evaluation
C. Day-to-day recordings of child's progress
D. Teacher's progress (goal analysis)
E. Alternatives - procedures - action

IV. Behavior Management - Many Exposures to Processes

A. one-to-one (tutorial experience)
B. small group teaching (four or less)
C. Whole class (no more than eight)

V. Early Involvement Emphasized

Concurrently with theory and practice, gradual assumption of responsibilities, exposure to many teaching situations, various practica in as many situations and as many levels as possible. Inter-change with other University programs and students should also be provided--perhaps at National conferences.

One important dimension to the integration of theory and practice was presented by Dr. Minskoff. This dimension was the concept of mastery point or mastery element of the practicum or field experience continuum. It was suggested that if you view a cornucopia on its side, the narrow point would represent the early and simple observational aspects of field experience. As experience broadens and becomes more real and first-hand (approaching the larger end of the cornucopia), mastery or near mastery should become evident.

Mastery of each step of field experience should occur as the student progresses in his training program. Ultimately, the student should reach a point of Teaching Independence in the field experience. Teaching Independence was defined by Minskoff as the "point on the continuum at which a student begins to integrate theory (course work) and his actual experience so that he makes his own decisions about what to do and is subsequently responsible for the outcomes of his work (rather than the teacher trainer being responsible).

Finally, it was emphasized that mastery and teaching independence can occur at any time!! This must be recognized by the teacher trainer!! (A student demonstrating mastery and teaching independence after two months should not be expected to remain in the practicum for the next seven months simply because it is part of the hour requirements--let the student assume a part-time position). During the early part of the working session, the group delineated a number of titles, or labels, given to learning disability specialists. After much discussion, the following statement was composed by the group: "There are many kinds of titles and labels for learning disabilities specialists, e.g. special class teacher, resource teacher, psycho-educational diagnostician, etc. Although their roles differ according to region, available resources and personnel, and conceptional framework, there are common skills and functions required of all learning disability specialists which give direction for learning disability programs." In order to provide some closure for this particular area, one sub-group met during the last working period and delineated roles and functions of learning disability specialists in three specific areas, e.g. learning disability teacher in a self-contained classroom, the learning disability resource room teacher, and the itinerant learning disability teacher. The roles and functions of these individuals are listed on the following page.

I. The special education teacher in a self-contained classroom.

Function--responsibilities

1. Participation in the selection of children for the classroom.
2. Primary responsibility for the education of children. Integration of content with remedial work in deficit areas. Knowledge of the curriculum (primarily in the elementary grades).
3. Coordination with the supplementary services offered by the school. (e.g., music, art, physical education, speech therapy, etc.)
4. Group behavior management. Determining classroom structure for group interaction.
5. Efficient use of assessment data.
6. Clinical teaching and ongoing evaluation.
7. Parent conferences. Discussion of problem. Suggestions for home management, and other services as indicated (family service, etc.)
8. Interprofessional communication. Arranging group conferences, summarizing and transmitting information effectively.
9. Preparation and selection of materials. Working knowledge of supplies and equipment budgeting funds, etc.
10. Applies psycho-educational data to educational planning.
11. Management of physical facilities, equipment and supplies. Arrangement of the environment to facilitate learning. Attention to distractability, hyperactivity, motor problems, etc.
12. In-service and public relations.
13. Pre-service (critic teaching).
14. Seeking out resources.
15. Identification with school staff.
16. Effective use of teacher aids.
17. Professional commitment: affiliation with professional organizations; keeping up on current literature.
18. Maintains a perspective of normal learning and behavior.
19. Helps children understand their own and other's problems and strengths.
20. Helps child establish realistic goals.
21. Sets realistic goals for child.
22. Adopts a realistic grading policy with respect to child's problem and progress. Coordinates with school policy.
23. Prepares case studies, progress reports and referrals with clarity, objectivity, and diplomacy.

Resource Room

1. Maintains a dual role tutoring the child and working with the classroom teacher to provide a coordinated program.
2. Psycho-educational evaluation skills.
3. Assists in modification of classroom assignments and school activities so children can respond effectively. Provide suggestions and modified materials to teachers and ancillary personnel.
4. Schedule activities to allow sufficient time for teaching, assessment and liaison work.
5. Knowledge of curricular sequence at many grade levels.

6. Organizes instruction in a meaningful sequential order.
7. Integrates work on deficit with content.
8. Participation in selection of children. Maintains reasonable case load.
9. Ability to relate on a long-term basis with individuals or small groups.
10. Teaches or works toward effective carry-over into classroom. Provides for flexible and continuing structure to meet the needs of a child as he moves from one environment to another.
11. Efficient use of assessment data.
12. Clinical teaching and ongoing evaluation.
13. Parent conference. Discussion of problem. Suggestions for home management, and other services as indicated (family service, etc.)
14. Interprofessional communication. Arranging group conferences, summarizing and transmitting information effectively.
15. Preparation and selection of materials. Working knowledge of supplies and equipment, budgeting funds, etc.
16. Applies psycho-educational data to educational planning.
17. Management of physical facilities, equipment and supplies. Arrangement of the environment to facilitate learning. Attention to distractability, hyperactivity, motor problems, etc.
18. In-service and public relations.
19. Pre-service (critic teaching).
20. Seeking out resources.
21. Identification with school staff.
22. Effective use of teacher aids.
23. Professional commitment; affiliation with professional organizations; keeping up on current literature.
24. Maintain a perspective of normal learning and behavior.
25. Helps children understand their own and other's problems and strengths.
26. Helps child establish realistic goals.
27. Sets realistic goals for child.
28. Adopts a realistic grading policy with respect to child's problem and progress. Coordinates with school policy.
29. Prepares case studies progress reports and referrals with clarity, objectivity, and diplomacy.

Itinerant Teacher

1. Selection of appropriate portable equipment and supplies.
2. Arranges schedules to provide maximum time for teaching and work with teachers. Avoids undue time on transportation.
3. Maximizes group procedures whenever possible.
4. Plans time to meet with the staffs from all schools.
5. Maintain a dual role tutoring the child and working with the classroom to provide a coordinated program.
6. Psycho-educational diagnostic skills.
7. Assists in modification of classroom assignments and school activities so children can respond effectively. Provide suggestions and modified materials to teachers and ancillary personnel.
8. Schedules activities to allow sufficient time for teaching, assessment and liaison work.

9. Knowledge of curricular sequence at many grade levels.
10. Organizes instruction in a meaningful sequential order.
11. Integrates work on deficit with content.
12. Participation in selection of children. Maintains reasonable case load.
13. Ability to relate on a long-term basis with individuals or small groups.
14. Teaches or works toward effective carry-over into classroom. Provides flexible structure to meet needs of a child as he moves from one environment to another.
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31. Sets realistic goals for child.
32. Adopts a realistic grading policy with respect to child's problem and progress. Coordinates with school policy.
33. Prepares case studies progress reports and referrals with clarity, objectivity, and diplomacy.

Finally, there were three basic areas under which we included a number of items that were not covered by this institute, and yet it was felt necessary that they be included as a part of the proceedings. These three areas are considered under: quality control in the field of learning disabilities, burning issues in the field of learning disabilities, and finally some recommended areas for future learning disability institutes. The sections on quality control and burning issues in the field were contributed by Dr. Alice Thompson.

QUALITY CONTROL

I. Qualities and characteristics of those who teach prospective teachers in follow-up training:

1. Keep current with developments in the field of learning disabilities, major theories, outstanding names, points of view, practices.
2. Maintain conversance with related fields of special education.
3. Be familiar with significant data from other fields; medicine, psychiatry, biology, neurology, sociology, physiology, etc.
4. Hold and articulate opinions without becoming trapped in opinionation and narrow ideologies.
5. Be able to communicate knowledge and ideas in organized, succinct ways.
6. Be able to maintain free-flowing personal contacts at all levels.
7. Be able to generate enthusiasm and excitement in others.
8. Be critical, but not negative.
9. Implement effective recruitment procedures to attract talent and dedication.
10. Consistently and amply observe trainees in action, confer, evaluate, suggest, illuminate.
11. Develop ability to spot strengths and weaknesses quickly.
12. Be able to arrange demonstration (either by themselves or their deputies) of the various competencies. (i.e., leaders should be themselves intimately experienced with classroom management and application of teaching techniques.)

II. Major features of "holding the line" in learning disabilities:
   1. Keep the forward thrust.
   2. Distinguish the main line from the peripheral, tangential, esoteric, diversionary.
   3. Exercise leadership in analysis of publications and in contributing to publication.
   4. Select and listen to significant target groups.
      (a) Teachers with experience, success, and ideas.
      (b) Publishers of educational materials.
      (c) Research groups.
      (d) Medical groups.
      (e) Parent groups.
      (f) Legislators.
   5. Avoid "siren's song" about spectacular systems or methods emanating from groups peripheral to education.
   6. Capitalize on the models and knowledge of other fields, without becoming a pale and forced reflection, e.g., the medical model.

III. Responsibilities for Field Development in Learning Disabilities:
   1. Plan and inaugurate research in depth. Collect areas of ignorance and question, select among the most pressing, help plan the research design, implement the design by enlisting centers, schools, or agencies capable of carrying it out; see that results are confirmed, replicated, disseminated, e.g. what can research (and computers) tell us about:
      (a) Reversals and mixed dominance.
      (b) High reading-low math versus high math-low reading.
      (c) Progress of children with learning deficiencies in tutorial settings versus in general classroom sittings with similar methodology.

2. Maintain a forum for disagreements. Examine trends, make suggestions.
3. Keep the field moving: what are the publishers doing? Who is relating one trend to another? What are the findings in medicine, biology, pharmacology, psychology, etc. which should have impact on training in learning disabilities.
4. Bring small groups together at regular intervals (annually): groups of outstanding individuals who will conduct symposia on assigned topics; prepared papers on each aspect of the issue, with immediate feedback, commentary, challenge by a critic panel. Six to eight prepared papers, divided into contrasting presentations. Edit and publish immediately.
5. Identify or bring into being several research-development-experimental centers which will operate for specified periods to gather evidence on particular questions (e.g., how much does visual-perceptual training generalize to reading improvement (already too late). These centers will be schools, incorporating cross sections of normal and unusual children (excluding gross sensory and motor deficits). Methods will be tried and evaluated. (This may be on the drawing boards already.)
6. Operate according to a set of ethical and professional standards which ought to be developed by the learning disabilities profession.
7. Sift and specify adequate assessment and evaluation techniques, taking positions on significance of advanced thinking on mental abilities, "intelligence," IQ, Level I or Level II mental abilities (a la Arthur Jensen), etc.

IV. Burning Issues

1. What are the severity boundaries of learning disabilities: that is, how involved shall a child be before he is provided with help?
2. Are learning disabilities composed of various developmental lags and disparities along a linear maturational time-table of such nature that we can specify developmental equivalents and move from there; or are learning disabilities composed primarily of deficits which effectively remove the individual from any positioning along a maturational continuum?
3. Do we mount a campaign to infiltrate general education with information and in-classroom methodology to reduce the pressure on special education services for children with mild to moderate learning irregularities?
4. How do we get out of the position of being "the last to know?" Children are identified in the classroom as exceptional; they are referred, tested, advised; parents are sent here and there: medical regimens are undertaken; private tutoring tried; psychotherapy tried; etc. before they are clearly brought into the area of learning disabilities. Do we educate general classroom teachers, devise screening criteria, offer pre-school diagnostic services, etc?
5. Can we take a leadership role in communicating with administration specifying curriculum content, information-acquisition sequences, criteria for grouping children for optimun learning for all (e.g. should we take a position on traditional classroom groupings or lock-step versus self-paced learning, etc.?)

6. Is "learning disability" really a field? Like emotional disturbance, cultural deprivation, brain damage, aphasia, cognitive disorder, et al learning deficiency may not be a "field."
7. How far can adjunctive aid be implemented in teaching children with learning disabilities: aides (educators), other children, counselors, community personnel?
8. To what extent are the various phenomena of behavior deviations on the part of children with learning disabilities modifiable through the medium of adequate planning for learning progress?
9. To what extent are the manifestations which we assume under learning disability mere artifacts of our passion for uniformity, created and fixated by factors of prestige, competition, and other paraphernalia of a society whose values are in transition?

V. Areas for Future Institutes

Dr. Minskoff:	Who is the professional trainer? What are his qualifications? Who are you to teach others how to teach learning disability kids?
Dr. Mann:	Aid each other's brains to share strengths and weaknesses of differing programs.
Dr. Van Osdol:	Include public school learning disability teachers in evaluation of post training.
Dr. Minskoff:	Ethics of advertising and faddism in learning disability field and proliferation of clichés.

GROUP REPORT--JEANNE McRAE McCARTHY, CHAIRMAN

Participants--Louis Bransford, David K. Dawson, Evelyn Deno, Marianne Frostig, Ph.D. (Distinguished Visitor), Betty Gallistel, Floyd Hudson, Raleigh Huizinga (Doctoral Assistant), Jerri Johnson, Jean Lukens, Jeanne McRae McCarthy (Chairman), Mario Pascale, Dorothy J. Sievers, Heather Wallace (Graduate Assistant), Bill Watson, Eleanor C. Westhead

Introduction

This report, of the results of six intensive work sessions by this committee of twelve participants, has been organized in the same sequence that was followed in the work sessions:

1. A delineation of the basic issues in pre-service and in-service training distilled from the working papers prepared by the participants prior to the Advanced Study Institute.
2. The specific roles and functions of the Learning Disability Teacher.

3. Assumed pre-requisite competencies for the Master's Degree candidate in Learning Disabilities.
4. A basic teaching model for the Learning Disabilities Specialist.
5. A basic training model for the Learning Disabilities Specialist.
6. A conceptual framework for the preparation of teachers of children with learning disabilities.
7. Implications for training.

Basic Issues

From the working papers submitted by each of the participants, it was possible to delineate seven basic issues, each of which could be expanded to include many related problem areas. The issues of concern to the members of this committee revealed a common thread of pragmatism, which characterized the work of the committee throughout all the working sessions. The issues most clearly of concern to the participants before the conference included these seven broad areas:

I. Relationships within the field of learning disabilities, as well as between the categories of special education, between special and general education, and between the other disciplines concerned with the learning disabled child, continue as basic issues:

   A. Intra-disciplinary issues involve the focus of remediation on strengths and/or weaknesses; remediability of the disability; the existence of the target population; and the existence of a unique and communicable body of knowledge and skills in the field of learning disabilities;

   B. The relationships between learning disabilities and general education, both at the university level and the public school level, continue to constitute important problem areas;

   C. The delineation of function and areas of service between speech correction, remedial reading, programs for slow learners, some EMH programs and learning disabilities, continue to be a source of concern. The significance of this issue seems to be affected directly by local and state legislation, and rules and regulations within the state, or within the local district;

   D. Inter-disciplinary issues include the possible conflict between the role of the diagnostic remedial specialist and psychologist, especially in states with strict certification or licensing laws for psychologists;

E. The unique contribution of the learning disabilities specialist on the inter-disciplinary team and the training necessary for real participation, appears to continue as an issue.

II. The need for a standardized form or uniform model in the preparation of learning disabilities specialists raised some questions. This issue pointed to the need for alternative models rather than one model.

III. Pre-school programs of early identification and prevention appear to present unique problems and to raise basic issues involving the problem of a self-fulfilling prophecy, as well as the lack of predictive validity of many instruments used with the pre-school child.

IV. The more restrictive, as opposed to a less restrictive, definition of learning disability continues to cause concern, especially in the light of the current trend to soften the categories.

V. The role of the public schools in the preparation of teachers appears to be a keen issue, with much emphasis being placed on a cooperative arrangement between the universities and the public schools. A sub-issue, but related to responsibility for training, is that of which agency should and will shape the role of the learning disability teacher, state departments of education, university training programs or public schools.

VI. A delineation of the tasks expected of children at each stage of development would seem to be the key issue upon which the function of the teacher needs to be based, and ultimately the requisite areas of the training program.

VII. The issue of multi-levels of competence for a variety of roles, clearly spelled out in training and practice, is still evident. The wisdom of training a teacher for the variety of jobs which she may encounter, as opposed to training her for a specific level of competence or specialty, continues to need careful thought.

Although these are the issues spelled out by the members of the committee, there also seemed to be a generalized underlying concern about the existence of a body of knowledge peculiar to learning disabilities, about the relationships between other allied and concerned professional groups, as well as concern about definitions and prevalence.

As a result of the presentation of Richard Usher, the first main speaker, time was spent at the first working session in exploring the basic beliefs underlying the statements of basic issues. It was profitable to explore the personal frames of reference of the participants, recognizing the importance of the affective domain as it underlies the cognitive approach to the issues. Each participant was asked to state the most important belief he holds about learning disabilities, i.e. the belief which seems to underlie many of the decisions which he makes in regard to the issues.

This proved to be a difficult task and generated a diverse collection of beliefs around which there was little concensus. However, this exercise served as a springboard for the profitable interaction which followed.

The Basic Teaching Model for the Learning Disabilities Specialist. (M.A. Level.)

A. It is assumed that the person entering a Master's Degree training program in which the skills necessary to teach learning disabled children will be developed, will enter the program with competencies commonly found in well trained elementary teachers. These competencies will need to be demonstrated in one of three ways:

1. Required courses
2. A period of observation
3. Through proficiency examination

The prerequisite competencies can be classified under three categories: skills, knowledges and experiences. The candidate will have had successful teaching experience with children and know how to teach reading, arithmetic and language to normal children. The candidate will have demonstrated classroom management skills. In addition, the candidate will have demonstrated knowledge in the following areas:

1. Basic curriculum
2. Media and materials
3. Child growth and development
4. Exceptionality

These areas would be considered prerequisite to the courses required in the Master's program. It is also assumed that the candidate will need to be trained for a variety of roles which are emerging for the learning disabilities specialist:

1. Special class teacher
2. Resource room teacher
3. Itinerant teacher
4. Consultant to the classroom teachers
5. A media specialist
6. Psycho-educational diagnostician
7. Clinic teacher

B. The roles and functions of the learning disabilities teacher were approached from two points of view:

1. The critical skills to be developed in children
2. The critical skills to be developed in the teacher

In an effort to delineate the skills which need to be developed in each child, some time was spent on areas of competence, such as motor function, language, perception, cognition, academic skills, etc. It was found that this approach was not a viable one in that the product would have to be delineated at each age in each of these areas. Several models were then explored in order to arrive at a conceptual framework for thinking about the skills which need to be developed in the children. This line of thinking proved to be too time consuming for this conference, and would have duplicated previous work done by curriculum specialists. It became immediately apparent that the skills to be developed in the children were the same skills which need development in all children. However, the basic teaching model which was derived (Figure I) proved helpful in thinking about the skills to be developed in the teacher.

These skills can be divided into those concerned with the analysis of the learner, and those concerned with the curricular or educational variables. From this analysis of the learner and the educational variables, the teacher needs to make specific decisions aimed at effecting a match between the cognitive style of the learner and the cognitive demands of the task. Once the decision has been made, the teacher needs to implement all aspects of the decision making process. A constant monitoring of the process will feed back into an on-going analysis of the learner and curricular variables and further decision making. This process relates to the first five skills listed below as being necessary for the learning disabilities specialist. In addition, the process of interaction between the teacher and the child needs to be communicated to others in the school or home environment. These needs, to relate effectively to all areas of the child's environment, reflect the last five skills delineated below.

As a result of the discussion of models and frames of reference, it was possible to delineate some of the skills which were felt to be critical to the function of the learning disability teacher:

1. The learning disability teacher must be able to see differences between and within individuals.

2. The learning disability teacher must be able to collect and process all relevant data.

3. The teacher must be able to conduct educational evaluations, screening and individual diagnosis.

4. The learning disability teacher must be able to make educational decisions in regard to:
    a. Classroom procedures
    b. Curriculum
    c. Planning
    d. Methods and materials
    e. Educational Objectives (short, intermediate and long term)

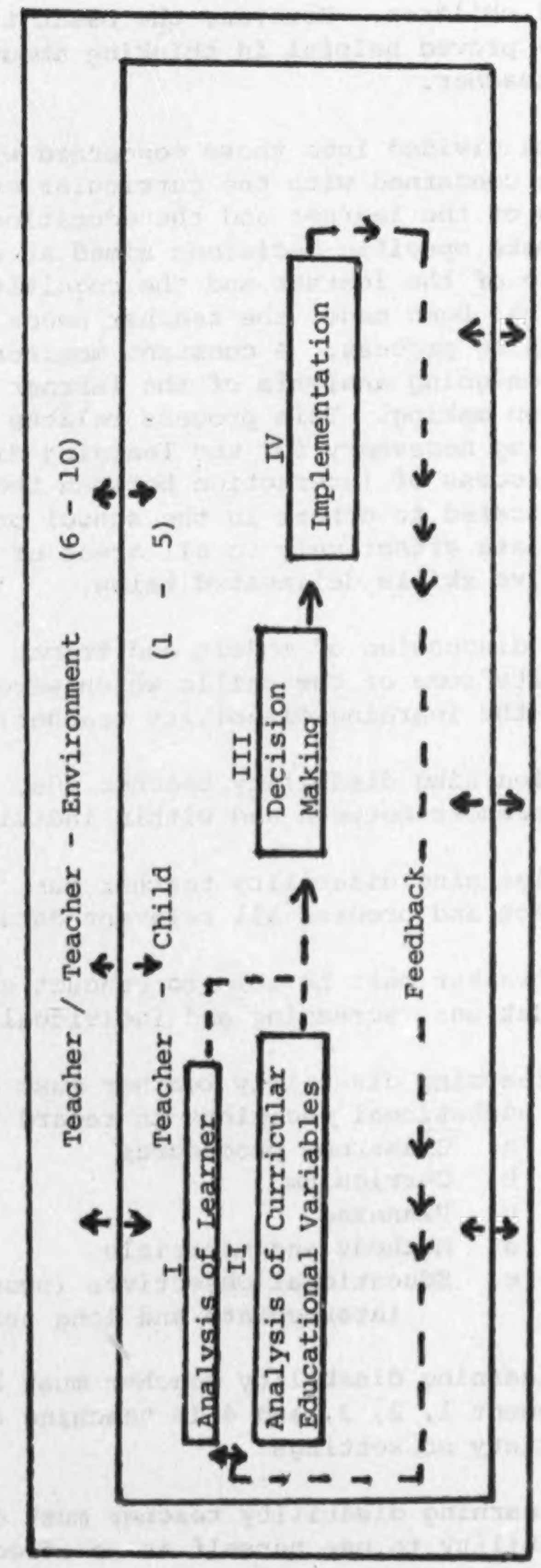
5. The learning disability teacher must be able to implement 1, 2, 3, and 4 in teaching children in a variety of settings.

6. The learning disability teacher must develop the ability to use herself as an effective instrument.

7. The learning disability teacher must acquire communication skills with teachers, parents, children and other professionals.

Figure One

Basic Teaching Model for Special Education
(Learning Disability Specialist)


Teacher / Teacher - Environment (6 - 10)
Teacher
Child (1 - 5)
I
Analysis of Learner
II
Analysis of Curricular
Educational Variables
III
Decision
Making
IV
Implementation
Feedback

8. The learning disability teacher must possess an awareness of her role in the school system.
9. The learning disability teacher must have the ability to evaluate and implement research data.
10. The learning disability teacher must be able to foster and disseminate general knowledge about learning disabilities in children.

It was felt that these skills would be necessary to the functioning of the learning disability specialist, irrespective of the specific roles involved.

Basic Training Model

The major work of the committee can be condensed into the Basic Training Model as presented in Figure 2. This model is tied closely to the skills which were delineated in the teaching model:

1. The analysis of the learner
2. The analysis of the curriculum
3. Implementation

Figure 2 represents the skills that must be developed in a Master's program, the knowledge that must be gained, and the experiences that must be provided. Careful study of this training model should lead directly to an organization of content necessary for the training of learning disabilities specialists at the Master's level.

The organization of these areas of skills, knowledges and experiences into a sequence of courses can be done in some situations by utilizing or revamping the content of existing courses. In other situations, it may be necessary to rewrite course outlines, or to introduce new courses. Of utmost importance is the integration of theory with the development of skills and the opportunity to apply the skills with children.

This committee emphasized the teacher-as-an-effective person in all of its deliberation about the preparation of teachers of children with learning disabilities. The sensitivities, beliefs, values, inadequacies, strengths, and spontaneity which the teacher brings to the training program, form the keystone upon which the program is built. However, teacher effectiveness is a teachable commodity, provided that the knowledges and experiences are sufficient to develop the skills felt to be necessary for the Master's Degree learning disabilities specialist.

Figure 3 presents a schematic summary of the conceptual framework underlying the preparation necessary and outlined by this committee.

Implications for Training

The proposed model involves implication for training, both specific and general. These implications can be most simply stated in a series of

Figure 2 *

Basic Training Model for Special Education
(Learning Disabilities Specialist)

	Skills	Knowledges	Experiences
I. Analysis of Learner	A. Techniques of systematic behavior sampling. 1. Observation methods 2. Use of standardized and other tests 3. Interviewing techniques. B. Interpretation of behavior sampling data.	A. Basic measurement theory. B. Learning theory and relevant developmental theory. 1. Perceptual-cognitive development; 2. Personal-social development; C. Theories re: etiology and nature of learning disability. D. Knowledge of other disciplines (how they evaluate/diagnose, etc.) E. Personality theory.	A. Administrates selected psycho-educational tests. B. Designs and conducts systematic observation procedures. C. Practice in synthesizing data in multi-disciplinary conferences. D. Observes the techniques of related disciplines.

*Continued on the following page

Figure 2*

	Skills	Knowledges	Experiences
II. Analysis of Curriculum and learning related instructional variables.	A. Ability to: 1. Adapt curricular content; 2. Set individual instructional objectives; 3. Do task analysis; 4. Identify on-going classroom conditions which may be involved in the learning problem.	A. Comparative analysis of general and special education; 1. Instructional systems; (such as different approaches to reading instruction; modern vs traditional approaches to math and arithmetic processes. 2. Special classroom procedures; 3. Knowledge of curricular content; 4. Educational objectives; 5. Media and materials; 6. Theories of concept & skill hierarchies.	A. Micro-teaching. B. Real and simulated experiences in: 1. Task analyses. 2. Curricular annotation. 3. Writing instructional objectives. C. Under supervision. assume responsibility for doing in connection with actual instruction of the child. D. Practicum and teaching experience.

*Continued on the following page

Figure 2*

	Skills	Knowledges	Experiences
III. Implementation	A. Decision making skills.	A. Group process & dynamics. 1. Social psychology/ group process theory;	A. Simulation, role playing.
	B. Integrating skills.	2. Methods of systematic inquiry (design of evaluation systems, methods of objectifying results, etc.)	B. See block I: Synthesizing data in interdisciplinary conference.
	C. Communication skills.	3. Legal and administrative parameters under which the program is able to operate. 4. Current knowledge of the field and resources within the field. 5. Professional ethics (including an understanding of the limits of own competence). 6. Community resources.	C. Participation as a leader in class; On-going exploration of professional beliefs; Structured observation of parent conferences, faculty meetings, PTA meetings, as part of field experiences; Participation in in-service programs in the university and public school system.

*Continued on the following page

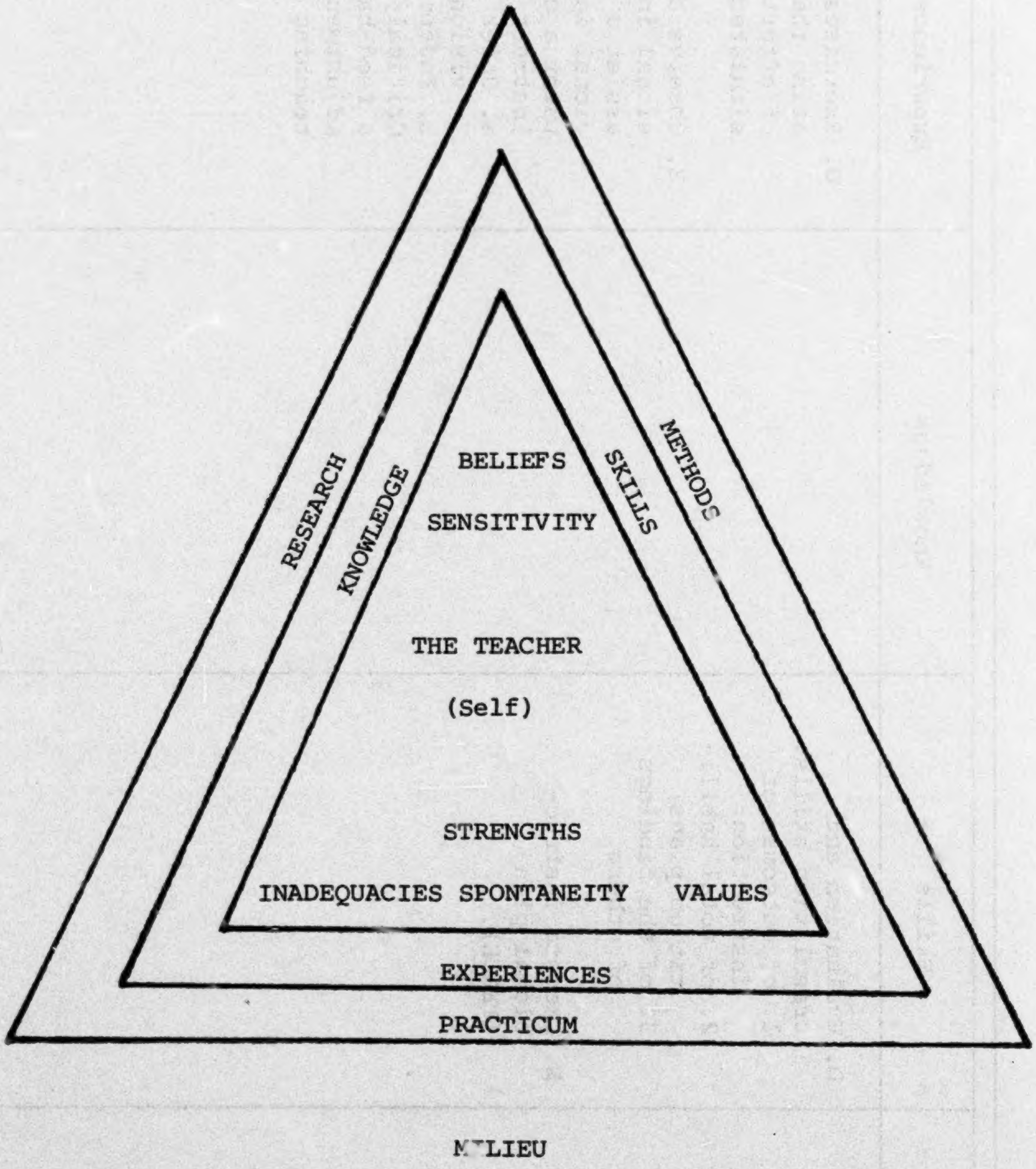
Figure 2

	Skills	Knowledges	Experiences
	D. Evaluation and translation skills: 1. of outcomes of instruction; 2. of total habilitation plans; 3. of the findings of others. E. Execute instructional plan (TEACH).		D. Exercises in evaluating the outcomes of efforts, both simulated & actual. E. Observe a professional instruct; assist a professional instruct; tutor a child; instruct a group: a. Under supervision b. Independently Critical follow-up & feed-back to effect adjustment in the teaching process.

Figure 3

CONCEPTUAL FRAMEWORK FOR THE PREPARATION

OF TEACHERS OF CHILDREN WITH LEARNING DISABILITIES


RESEARCH
KNOWLEDGE
BELIEFS
SENSITIVITY
SKILLS
METHODS
THE TEACHER
(Self)
STRENGTHS
INADEQUACIES
SPONTANEITY
VALUES
EXPERIENCES
PRACTICUM
MILIEU

pragmatic statements:

1. The training program for the learning disability specialist entails more than a one year program for the Master's Degree.
2. Assumed prerequisites need to include successful classroom teaching experience and some preliminary courses in Exceptional Children, curriculum, media and materials, and child growth and development.
3. These competencies can be demonstrated through course work, proficiency examination or through a period of observation.
4. The training model provides the necessary interaction of theory, skill and practice, to enable the learning disability specialist to know what is important, what to do about it, and why.
5. The model can be useful to the program graduate in role definition in a variety of settings--diagnostic team, educational setting or consultation setting. It can aid in defining the learning disability specialists' role in relation to educational colleagues, diagnostic team members and school administration.
6. Teacher effectiveness is a teachable commodity, if theoretical knowledge and experiences can be integrated in the development of teaching skills.

GROUP REPORT--HAROLD J. Mc GRADY, CHAIRMAN

Participants--Francis X. Blair, Virginia L. Brown, Leo F. Buscaglia, Dorothy Campbell, Edward Donlon, Arnold Faasler, Fred Hagan (Doctoral Assistant), Donald D. Hammill, Barbara Keogh, Frank King, Harold J. Mc Grady (Chairman), Donald F. Maietta, Walter Olson, Walter F. Thomas

Introduction

The discussions summarized here occurred over a two-day period, during four sessions of approximately two hours each. Webster's New World Dictionary of the American Language (1960 College Edition) interprets the definition of the word "discuss" as follows:

> "discuss implies a talking about something in a deliberative fashion, with varying opinions offered constructively and, usually, amicably, so as to settle an issue, decide on a course of action, etc." (p. 418)

This is precisely what happened during the talks of December 4 and 5, 1969, at the Arizona Inn, Tucson. The conversations were indeed amicable and constructive. The pervasive attitude of the group was a positive belief that commonalities exist among programs which train teachers of children with learning disabilities. Furthermore, there was a feeling that meetings such as these are a forward step in the growth of the Learning Disabilities field in America. The sharing of information among the personnel from programs throughout the country represents progress. But, more importantly, it is hoped that a wider dissemination of the information consolidated from this conference will be of benefit to all workers in Learning Disabilities. To that end we submit this report of our deliberations.

Pre-Conference Thinking

Prior to the Arizona conference, each participant was asked to submit a written presentation about what he thought were the most important issues in the training of teachers of children with learning disabilities. It would be cumbersome to report these in detail. However, an outline summary of topics or issues prominent in the minds of participants may be useful in interpretation of their subsequent discussions as a group. Following is such an outline, categorized according to major areas of concern. The discerning reader will note that the concerns of the participants evidenced from their pre-conference thinking are reflected in their subsequent discussions at the face-to-face meetings.

AREAS OF CONCERN SUGGESTED BY PREPARED PRE-CONFERENCE STATEMENTS

I. The Role of the Learning Disability Teacher
    a. In reference to other special education teachers;
    b. In reference to other regular teachers;
    c. As a consultant;
    d. As part of a team;
    e. As a clinically or educationally trained person.

II. Conceptualization of and for Training Programs
    a. The field needs its own identity--has borrowed from other disciplines--needs innovation--needs conceptual frame or model.
    b. There are many unknowns which lead to great heterogeneity of programs with different emphases--need to account for overlapping disorders.
    c. There is need for evaluating validity of techniques, materials, strategies.
    d. Definitional problems influence all program conceptualization.

III. Needs for Implementation of Training Programs
    a. Better cooperation and coordination with community and schools;
    b. Pre-training programs;
    c. Clarification of certification.

Guidelines

Discussions proceeded according to the guidelines set up for the total conference. For example, the operational definition of learning disabilities was that which had been set forth by the National Advisory Committee on Handicapped Children:

> "Children with 'specific learning disabilities' evidence disorder in one or more of the basic processes involved in understanding or use of spoken or written language. Such a disorder may be manifested in imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. These disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing or motor handicaps, to mental retardation, emotional disturbance, or to environmental deprivation."

Another guideline was that the groups would focus sequentially on (1) specific roles and functions of Learning Disabilities teachers, and (2) implications for preparing such personnel. The greatest portion of our discussions was concerned with the first of these two topics. The text which follows is an attempt to recount the major points raised in discussion. This has been done categorically, rather than chronologically. In categorizing, summarizing and conceptualizing free-running discourse, the chairman's biases have probably influenced the ways in which the final conclusions are stated. However, a sincere attempt has been made to incorporate consensus opinion from the group with major dissenting points mentioned whenever appropriate.

The discussion seemed to raise three general questions about the roles and functions of learning disabilities teachers:

(1) What are the variables which affect or determine the role of the teacher of children with learning disabilities?
(2) What are the universals of the role that are common to all learning disabilities teachers, regardless of such variables?
(3) What competencies should all learning disabilities teachers have in order to fulfill their role?

Considerations of training program implementation were developed from these three major questions. The summary of our discussion has been organized and reported accordingly, and implications for training have been drawn. In this report we have attempted to maintain a consistency about our use of the terms "role", "function" and "competency." "Role" and "function" have been taken as largely synonymous terms for the special duties or performance required of a person in the course of his work or activity (after Webster). Stated differently, it might be said that role refers to what a person's responsibilities are in a particular position. At times a nuance of meaning may separate "role" and "function", a role connotes a relationship to other persons, whereas function implies a duty or activity in itself. The term "competency" was taken to mean specific skills or knowledge deemed necessary to fulfill the designated roles or functions.

Variables Affecting the Role of the Learning Disabilities Teacher

Variables affecting the role of the teacher of children with learning disabilities (TCLD) might be categorized under two major headings:

(A) Definition and/or conceptualization; and
(B) the milieu

The first heading represents the way in which the teacher views learning disabilities as an entity. It is a conglomerate of her philosophy, training, beliefs, attitudes and perhaps even her uniqueness as a personality. The second heading is a rubric for environmental variables as they influence the role of the TCLD. The former might be thought of as theoretical aspects with the latter being pragmatic or empirical variables.

(A) Definition or conceptualization. It has been said that beauty is in the eye of the beholder. There is no question that our own experiences, perceptions, beliefs and attitudes mold our conceptualization of anything. A personal perspective of learning disabilities is no different. It is not exempt from these variables, no matter how specific the currently accepted definition may be. Although a standard lexical description of learning disabilities was accepted as a working definition for this conference, it was felt generally by this group that confusions and ambiguities still exist in the minds of the beholders.

It was agreed that a definition is necessary as a step toward delimiting the subject. Some participants described this process as creating a box. It implies that learning disabilities can be described in enough detail that it can be recognized as an entity within some specific boundaries. This may be viewed as helpful or useful in the identification of disabilities, for meeting legal demands or educational placement needs, or for the formulation of state certification. Thus, precise definitions have pragmatic value in addition to playing a role in creating a more uniform conceptualization of the entity.

But the "box analogy" has other implications of a less positive nature. There is the implication that a definition might be restrictive. This analogy implies that the definition does more than merely set boundaries or draw lines. It acts as an enclosure, restricting the view from both within and without. Therefore, fitting learning disabilities within a box was viewed as a positive step toward solidification as an entity, but in doing so it was recognized that artificial barriers are created.

There seemed to be a general consensus of a need for flexibility or fluidity in creating such a box. To carry the analogy further, it might be viewed as a box-within-a-box (or series of boxes). Thus, learning disabilities would be viewed as a part of general education, or as a part of special education, if we think in educational terms. If we build our box according to learning processes and breakdown, then the universal container is learning, with sub-boxes being the multitude of types of disruptions of learning and finally specific learning disabilities. In whatever manner these subdivisions are created, it was agreed that interaction must be allowed between them. Perhaps the boxes should have windows in them or be made entirely of glass to allow for a view of all parts of the universal container from any vantage point. Moreover, there should be open doors in the boxes to allow for free transgression across boundary lines. And perhaps the material it is made of should be plastic, to allow for flexibility and change in the boundaries to meet the needs of different circumstances.

These comments reflect the idea that learning disabilities should be conceptualized from a broad base. If it is viewed as such, we are not only concerned with the uniqueness of a learning disability per se, but consider it relative to other disorders and to normal or expected learning processess as well. Also, there may be some flexibility in interpretation to accomodate changes in our concepts in the future.

Only if learning disabilities is conceptualized in this manner does an "interdisciplinary" approach have significance. The consensus seemed to be that in our zeal to specify definition of learning disabilities we should not neglect the total context in which such an entity occurs.

The nature of the definition will determine the incidence of learning disabilities. This modification of the number of children so defined will pragmatically limit the number and type of children that can be served by the TCLD. If the definition is so broad that it includes too many children, she cannot serve many in depth and her role will be cursory, supportive and consultative. If the definition is more specific and limiting she will deal with fewer children, but she will deal with them in greater depth and breadth, and will probably specialize in certain types of disabilities. Her role then will be more directly therapeutic....

How does this definitional conceptualization affect the role of the TCLD? Several possibilities seemed to emerge from group discussion. Basically, however, they might be summed up in terms of our analogy by stating that the role or function of the TCLD will be determined or shaped by the box she works in. The box we are referring to now, of course, is the way in which the TCLD conceptualizes learning disabilities.

If the TCLD visualizes the learning disability as a segment of total education, then she may see herself as contributing to general education. The TCLD was many times considered the person who can bridge the gap between general education and special education.

Principles derived from and learned by teaching children with learning disabilities may have value in the regular classroom. The TCLD may see herself as contributing to this role merely by identifying new and useful teaching methods or techniques. Or she may see her role as one of passing on this information to regular teachers so they may prevent and/or remediate some types of disorders within the regular classroom structure. These roles or functions for the TCLD can only exist if the teacher conceptualizes learning disabilities in a broad educational perspective. Some persons may even carry this principle to the extreme point of concluding that all teachers should be trained completely in dealing with learning disabilities and that these problems be handled solely at the classroom level. The group discussion of this point indicated that there is a need for special teachers to deal with the more acute or severe specific learning disabilities. It was felt that the classroom teacher's role may be more in raising questions about potential learning disorders and initiating proper referral. Also, she must be endowed with a sensitivity about ways in which her own teaching methods or style might be detrimental to certain kinds of learning disabilities children.

A broader conceptualization of learning disabilities also forces the TCLD to consider critically what the child needs to know or what he should be taught. This means that she must define educational learning disabilities relative to the particular curriculum of the school and she must view all learning in relation to the current demands of the child's society. Within this framework, the mere consideration of *what* should be taught is heavily affected by the TCLD's conceptualization of learning disability. If she views it predominantly as academic failure (or underachievement), she may see her role more directly in terms of remediation in academic areas such as reading, writing, spelling and arithmetic. Even the terms "failure" or "underachievement" may be interpreted differently. E.g., these may be gauged relative to "average age" expectancy or "Average grade" expectancy so that the child is considered a problem only if he performs significantly "below average". If the TCLD conceptualizes learning disabilities only in these terms, she will deal with a different population of children than if she thinks about learning disabilities as "inadequate performance relative to learning 'potential'." In this instance children who perform above average could still be considered as learning disabilities, because they are not operating up to the *potential* level of achievement. All of this assumes that patently mentally retarded children are not included, as per the adopted definitions of learning disabilities. It is recognized, however, that in practice many persons do not conceptualize it this way and this affects the roles of teachers who view learning disabilities in such a manner.

Many persons do not view learning disabilities as essentially or solely academic learning failure. Rather, it is viewed as a breakdown in learning processes which cuts across the arbitrary lines of academic learning. In this view the disorder may be considered as "language" *vs* "visual"; or "receptive" *vs* "associational" *vs* "expressive"; or "motor", etc. These two major contrasting outlooks on the nature of learning disabilities have considerable effect on the way the TCLD views her role. They are discussed below as the "educational" *vs* "clinical" concept of the TCLD.

A key generalization agreed upon by all members of this group was that the learning disabled child is more normal than abnormal. This affects the role of the TCLD, because it shapes her major goal: to allow the child to operate efficiently in as many ways as possible within the normal demands of society. If learning disabilities is viewed as purely academic failure, this means getting the child back into the normal classroom as soon as possible or allowing him to remain in the classroom for whatever portions he responds within normal limits. If learning disabilities is viewed as aberrant learning processes, it means allowing the child to learn as much as possible through his intact processes while attemtping to remediate his deficits. It also means utilizing the assets to help improve the deficits. But the role or function of the Learning Disabilities teacher in either instance is to alleviate areas of disability within the child while allowing him to proceed as normally as possible for aspects of his living in which disability has not been so debilitating.

Another aspect of the conceptualization of learning disorders which affects the role of the TCLD is the beliefs she holds about the relationship between disorders of learning and emotional disturbance. Basically this revolves around the notion of whether emotional disturbance is thought to be the cause or effect of the learning disability in a particular child. Does the teacher consider the emotional disorder as causative or associative in relation to the learning disability? It is generally assumed that if the child is classified as emotionally disturbed (ED) there is a psychogenic etiology. However, if the child is described as having a behavioral disturbance, which might include inattention, hyperkinetic behavior, etc., there is usually question about such an etiology.

Typically, in fact, the child may be assumed to have a minimal brain dysfunction. This is typically accompanied by a specific learning disability which calls for remediation. If the TCLD views the behavioral disturbance as merely accompanying the learning disability, but unrelated, she will not feel it is her role to deal with that aspect of the child's problem. If she feels the behavioral disturbance in itself is diagnostic of psychogenic causation, she may not wish to deal with the problem at all, but refer the child for psychological and/or psychiatric consultation and therapy. If, however, it is her belief that the learning disability is the underlying causative agent of the manifested behavioral disturbance, she will attack the learning problem with the expectation of relieving all overt aspects of the childhood disorder.

Thus, the TCLD's beliefs or conceptualizations about learning disability vs emotional disturbance will alter her role through her altered expectations.

Other specific examples of factors which influence the teacher's-eye view of learning disabilities could be added. For example, some may consider learning disabilities as primarily a problem of development, rather than defect. This will modify the general teaching approach, types of children identified, etc. Most of the variables of conceptual frame of reference that could be added would be subsumed under the clinical vs educational dichotomy for viewing the role of the TCLD.

The role of the TCLD is shaped signigicantly by whether she considers herself as a "teacher" or a "therapist." This is often influenced by the setting in which she works. In a school she is most likely to be called a teacher. But she may do essentially the same job in a clinic and be called a therapist. As a result we see many evidences of combining the two terms. There is a publication called the Academic Therapy Quarterly; some school people are called learning therapists (or clinicians); and a prominent label is that of "clinical teacher." The consensus of opinion is that the TCLD brings the clinic to the school. The TCLD utilizes the individualization and analytic approach exemplified by clinical work to meet the needs of the child who is unable to cope with educational demands. In the teaching aspect of her role, then, the clinical approach is a common denominator.

There is another major question related to the TCLD as teacher vs therapist. That is, "What is her role in diagnosis?" If the TCLD is conceptualized as a teacher, primarily, her role may be viewed only as that of carrying out a teaching program based on previous diagnosis or educational recommendations. She may be thought of as a person whose major responsibility is to know how to carry through a variety of teaching techniques and methods. She will then utilize the appropriate method when informed of the nature of the child's problem. This is viewed as a naive concept of the TCLD. It was felt that the TCLD must have a role in the diagnosis or initial evaluation of the child with learning disabilities. The degree or manner in which this takes place will vary by setting and in terms of the individuals' conceptualizations of their own roles. This, of course, will depend largely on their previous training.

The diagnostic or evaluative role of the TCLD could be viewed along the following continuum. She could consider herself as merely a consultant to regular classroom teachers. In this diagnostic role she would observe and/or test children referred by regular teachers and prescribe treatment accordingly. In this case the TCLD's role with the child would be evaluative only, but at a limited level. Another variation would be to include the TCLD as a part of a diagnostic team. Her role on the team would vary in accordance with her own training and the capabilities of others on the team, but her primary function would be to evaluate specific academic and learning processes. This would be in contrast to others on the team who would assess overall potential, physical correlates, social factors, personality, etc. Also, it would be typical for the TCLD as part of the diagnostic team to make the educational recommendations or prescriptions following the initial evaluation process.

It was stressed that regardless of what degree the TCLD participates in initial diagnosis she must understand what is accomplished there. Otherwise, the most thorough and accurate diagnostic reports will be valueless to her in relating them to remediation. Therefore, this group of discussants was in general agreement that the TCLD must conceptualize herself as a diagnostician to some degree. The most comprehensive degree of this viewpoint is to consider the TCLD as a diagnostic teacher. In this way, regardless of the initial diagnosis, she is constantly re-evaluating, reclassifying and recategorizing the child and his problems.

Thus, we see that the role of the TCLD will vary according to the way in which it is defined or conceptualized. Under this rubric we have discussed the accepted lexical definition according to several interpretations:

a) learning disabilities viewed as either an academic disorder or a learning processes deficit;
b) the relationship between learning disabilities and other disorders, (e.g., emotional disturbance);
c) the learning disability in relation to general education
d) the essential normalcy of the child with learning disabilities; and
e) the clinical vs educational concept of the TCLD

(B) The milieu. Thus, the theory shapes the role of the TCLD. But, all of the theoretical bases and biases held by the teacher will be modified by the circumstances in which she is forced to operate. The milieu in which she functions may even negate some of her previous concepts of the role. Realization is never quite the same as anticipation. The pragmatics of the situation may alter her role far from her original conceptualization of what it should be. In fact, some persons contend that the role cannot be defined outside of a specific situation. What, then, are some of the variables or factors in the milieu which will serve as modifiers to the concept of the role which she developed throughout her training program? Some suggested variables are as follows.

(1) The roles performed by other professional colleagues.

It is reasonable to assume that what the TCLD does will rest largely on what other teachers, specialists, and administrators do or do not do in her job setting.

Let us first consider the role of the regular teacher. It was agreed by consensus in this disucssion group that the regular teacher usually does not deal with learning deficit, except for "normal variation" or normal range of deviation. As one participant put it, "She may group children and have three reading groups--plus Johnny and Mary." She will be able to manage the variation suggested by the three-level grouping, but the TCLD would be called in to remediate the problems of Johnny and Mary. The groupings, of course, will vary according to subject.

Thus, the role of the TCLD is created in part by what the regular teacher cannot cope with in her classroom. This means in some instances that outstanding teachers who intuitively use the methodology of the TCLD in dealing with individual problem children may lessen the load of the TCLD. The role of the TCLD in screening or identification of the learning disabilities children will also vary according to the degree that this is accomplished by the individual classroom teachers.

The role of TCLDs will vary also in relation to the roles assumed by other specialists. Again, it may be a valid generalization to say that she often steps in to "plug the gap" where individual needs of children have not been met. For example, the speech therapist may not be trained adequately to deal with language disabilities; the teacher of the deaf may feel constrained to manage the education of a hard-of-hearing child who has associated brain dysfunction; the teacher of the emotionally disturbed may be unprepared to remediate certain educational deficits; the teacher of the mentally retarded may have serious questions about whether a particular child is, in fact, retarded; the remedial reading teacher may feel that she is not helping a particular child; the school psychologist may be unable to provide specific educational recommendations, although thoroughly skilled in clinical diagnosis.

These are only examples of the many circumstances in which the role played by other specialists will affect the role of the TCLD.

(2) The TCLD role expected by other colleagues.

Thus, the specific roles and functions of the TCLD will be developed in accordance with the roles and functions assumed by her professional colleagues. Her role is not affected alone by what her colleagues do; it is also affected by what they expect her to do. Often, in fact, the TCLD is viewed as the panacea for all problem children in the school. In such instances, all "odd" children are shuttled to her for final solution. Thus, the role of the TCLD as conceived by teachers, specialists, and administrators is very important. The administrator's notions of her role are perhaps most influential.

If, for example, the administrator does not believe that learning disabilities even exist, the position will never be created. Contrastingly, if he believes the TCLD can handle all abnormal children, he will have set up a nearly impossible role for her. In general, the higher administrators within a school structure will determine if TCLD positions will be created and how many will be hired. But the principals of individual schools are highly influential in regard to how they will function day-to-day. It is a usually accepted axiom that the principal is in charge of everything that goes on in his building. This being the case, his attitudes about principals be properly acquainted with the role of the TCLD as she sees it and as she has been trained. It is helpful when the principal realizes this or when the responsibility for such specialists is delegated to a school district administrator whose expertise is special education.

But, the attitude of the principal will always affect the role of the TCLD. If he views the learning disabilities child, for example, as the "acting-out" child, he will reflect his philosophy to the teachers in his building. He may also affect the role by his biases concerning whether classes for learning disabilities should be segregated, resource, or itinerant. Usually, this type of concern can be alleviated by a process of "educating the principal." The TCLD, together with her higher administrative supervisors, must accomplish this role of communication if their goals are to be met.

It is often true that administrators try to put learning disabilities teachers into positions above and beyond their training. They are assigned roles according to school need rather than personal competency. For this reason, it is suggested that universities should concentrate on training "leadership personnel" in learning disabilities. They could have an impact on a greater number of students by providing in-service training as part of their role. The truth is that most TCLDs are not so trained. Despite this, administrators continue to put them in advanced roles.

It is unfortunate that school administrators often expect more from a TCLD than is reasonable. It would be best if they could accept each teacher in terms of what she is, that is, what capabilities she has from her training. But this is not so. Therefore, teachers must be trained to recognize this and to plan appropriate strategies to employ in different school systems.

(3) The settings.

The role of the TCLD will vary according to the setting. There is some agreement that the general goals of the TCLD are similar, regardless of the setting. That is, she aims to return the child to near-normal or normal functioning. But her role will vary in relation to the other persons who contribute to solving this problem. These will be different types of people, of course, in different settings. Therefore, she must know the range of organizational alternatives in order to maximize her efforts.

The setting is related to the educational vs clinical concept discussed above. In a school an educational model will be used most frequently. That is, educational strategies will be incorporated, and educational personnel will be utilized. This will determine the types of input of ideas and competencies within the milieu in which the TCLD works. Typically, then, in a school setting the TCLD will be a teacher primarily, with secondary or concomitant diagnostic roles. In a clinic setting, she may have solely diagnostic roles. If she teaches, it will be viewed as clinical teaching and she will often do diagnostic teaching. Also her role in relating the child's learning to a school curriculum will be less.

In any setting there will be a continuum of the degree of intervention. It might be charted as below, with degree of intervention operationally defined as amount of time spent with the child:

Setting	Degree of Intervention (Low to high)			
School	Consultation with teacher	Itinerant teacher	Resource room	Self-contained class
Clinic (Agency-speech clinic-mental health clinic-hospital clinic-psycho-educational clinic, etc.)	Doctor referral consultant	Occasional therapy	Regular therapy	Special clinic school

Regardless of setting, however, there is a commonality of role. That is discussed below as the expected role of the TCLD.

(4) Forces outside of the setting.

Forces outside of the school or the clinic will affect the role of the TCLD. It has been stated that the philosophy of training programs is one such force. The attitudes of other professionals has been noted, but it might be added that the expectancies of certain non-professionals (e.g., parents) are also influential. Perhaps special mention should be made of legislative forces and the influence of state agencies. Throughout our discussions it was stated that restrictive or unrealistic legislation in the area of learning disabilities often handicaps the TCLD in developing her appropriate role. An example is legislation which binds learning disability and emotionally disturbed children in one package, thus compounding the conceptual confusion that exists between these two types of children. It was urged that federal and state legislation in the field of learning disabilities be coordinated so that artificial restrictions not be placed on TCLDs.

This is manifested in the state certification regulations and/or interpretations by state departments of special education. State laws on this matter can be so narrow or so broad as to create problems. Thus, a need was expressed for some uniformity. But, the panel was very emphatic in their belief that such regulations should not be unduly restrictive. That is, guidelines would be sufficient, rather than locked-in course-by-course requisites, etc.

State departments were viewed as key contributors to the definition of the role of the TCLD. Thus, it was felt that competent, knowledgeable persons in the field of learning disabilities be part of state committees or agencies responsible for setting up regulatory measures for the field. It was also felt that there is strong need for cooperative programs of in-service training in which state departments, universities, and school districts combine their resources, personnel and planning effort. This would include not only in-service "retread" programs, but continual upgrading of working professionals.

Thus, the variables of the milieu include the roles performed by other professional colleagues; the TCLD role expected by other colleagues, the settings, and forces from outside the setting. All of these act to modify the conceptual role which the individual brings to the milieu. It should not be overlooked that the individual teacher herself is part of the milieu. Her own personality and beliefs become an interactional agent in the system. The teacher as a person may be the most critical variable of all those mentioned.

Universals of the TCLD Role

As indicated above, the role of the TCLD will vary according to several factors. But, this committee felt that the essence of the TCLD must be defined. What is it about the TCLD that will transcend all of the variables discussed? Furthermore, what role distinguishes the TCLD from all other teachers and/or specialists?

We have said that the teacher in the regular classroom teaches the curriculum. She attempts to follow an outline or sequence within an expected amount of variation. She attempts to impart a certain series of information or skills to her children. Thus, she generally follows the same course for all students. The TCLD deals with children who do not succeed in the regular curriculum because of specific learning deficits. (Other conditions are tested elsewhere, and are eliminated by definition; so learning disabilities is not to be considered synonymous with "underachievement.") Thus, the role of the TCLD is to teach children with specific learning disabilities. However, this does not mean that the role is as a tutor, merely repeating the work done in the classroom, or helping the child with his homework. Except in severe instances it does not mean that the TCLD is responsible for the child's entire academic regimen. (This would be true only for the small proportion of learning disabilities children placed in self-contained classes.)

Hence, the role of the TCLD is not to teach the curriculum, but to teach the child how to learn. In order to do this the TCLD must deal with the learning process, regardless of whether the presenting problem is one of failing in an academic area, such as reading.

This assumes, then, that the TCLD is capable of analyzing how a particular child learns best and adapting her methods and techniques accordingly. Such terms as "task analysis" and "analytic teaching" represent this point of view. The TCLD, then, adapts the methodology and her curriculum in such a manner that the child "learns how to learn." That is the essence of the role of the TCLD. It is the characteristic which makes her different from other teachers. In her analysis, of course, the TCLD does not consider only the characteristics of the child as a faulty learning mechanism. She must also concern herself with an analysis of other factors contributing to the problem, such as the nature of the curriculum, the characteristics of the child's teacher(s), and any other factors in the milieu. Her role must include a determination of which of these factors, interacting with the child's basic learning deficit, are detrimental to his learning, and work toward appropriate remedial procedures. For example, it may be that the TCLD, in discharging her responsibility to remediate specific deficits in educational accomplishment, may need to change certain attitudinal or motivational conditions.

We have defined the primary role of the TCLD as that of a special teacher. The definition is such, however, that this special teaching need not take place in a school. It could be conducted in a clinical setting as well. Furthermore, she could serve concomitant roles without jeopardizing her primary function. For example, she might aid in proper identification of children in the classroom; she might contribute to preventative teaching, by consultation with regular teachers and observation in classrooms; and she might participate actively in diagnostic programs within the system. Furthermore, she might see her roles as one of follow-up of children after they are dismissed from her teaching.

But each of these roles is a satellite one to her basic roles as a special teacher. Prevention, identification and evaluation are only by way of insuring that the proper children are filtered into her teaching program.

Regardless of how we verbalize these central roles, it is often correct that each individual teacher herself must define her own role and have a self-awareness of it, together with a knowledge of her own capabilities and limitations in filling that role.

Competencies of the TCLD

What, then, are the competencies or specific skills which should be "trained-in" to each prospective TCLD? If one were to sit down and make a list it would be endless. This group of discussants felt that such list-making might be a fruitless task. Not only would it be tedious, but the list would vary according to the conditions discussed above. The discussants felt that the above-mentioned philosophies and guidelines were the important bases within which a program for training teachers of children with learning disabilities should be constructed.

There are many different ways to conduct training programs to stay within such guidelines and philosophies. For example, some training programs may foster a particular teaching approach. This philosophy is acceptable as long as the approach is respectable and has demonstrated merit. Students entering such a program should be aware, however, that their training would consist primarily of learning that approach. Other programs might be eclectic or utilize combined approaches, depending upon the background and training of their faculty and staff. This, too, would be acceptable, unless being "eclectic" actually meant providing surface information or scattered information on a variety of approaches without reaching depth or quality in anything. Either of these basic alternatives might be fruitful. Therefore, the group stressed the need for individuality of training programs in learning disabilities. There was a sincere hope that program requirements will never be so rigidly fixed by legislation or administration that creative, innovative programs would have trouble existing if they have merit.

To give more structure to the guidelines for training programs, however, the following generalizations and assumptions are offered:

(1) Some competencies must be assumed for all teachers, regular or special. Following is a suggested list of such competencies. They are only examples and not intended to be all-inclusive. It is assumed that the TCLD will have these competencies, but is not assumed that she must have official certification as a regular teacher.

- a) teaching: The major function of the teacher is to teach. This truism was one of the few universals upon which unanimous agreement was possible. This is to say that the practice of teaching is her business, not diagnosis or research per se.
- b) materials: She must know what educational materials are available, how to choose them, how to manipulate them, and how to create new materials when needed.
- c) methodology: There must be an awareness of different methodologies and an understanding that they are differentially effective with specific children. The regular classroom teacher must know how to make minor modifications in the classroom.
- d) knowledge of resources: The teacher must know what referral sources are available to assist her in classifying and placing problem children.
- e) decision making: All teachers must be equipped with some degree of decision-making ability. Early recognition and identification may be entirely dependent on the regular teacher's decision that referral is necessary. For this reason, it is recommended that an up-grading of all regular education include some orientation to the special education field of learning disabilities.

(2) Additional competencies are needed for special education teachers. Areas of such competency, which correlate roughly with course designations would include:

- a) foundations or survey of special education
- b) language and learning processes (development);
- c) behavioral management;
- d) diagnostic procedure;
- e) curriculum and instructional skills (special).

(3) In addition to those competencies mentioned for regular and special teachers in general, the TCLD must have additional knowledge and skills. These are the special competencies which allow her to understand and deal with learning breakdowns relative to the environmental demands. Her

knowledge of such breakdowns must include disabilities of a) language, b) sensory-motor processes, c) perception (auditory, visual, tactile), and d) social perception or other nonverbal learning deficits.

Knowledge and skills in all of the above should enable the TCLD to perform the following functions:

Recognition → Initial Assessment → Educational Intervention → Continuing Evaluation

Any additional description or definition of competencies is merely a further breakdown of each phase of her role, or an expansion of how far to go in each. For example, "Should the TCLD be trained in formal or informal assessment techniques and which kinds of each?" or "How varied should her exposure be to different types of educational intervention?"

One general point of agreement should be stressed. That was in regard to the benefit of course-work alone. It was felt emphatically that a traditional academic sequence is not enough to train a good TCLD. Clinical and/or field and/or laboratory experiences must be built-in and closely related to the academic course sequence. Within that structure there must be room for individual expression on the part of the student. That is, some variations from lock-step are desirable. But, the non-lecture aspects of the program, including student teaching, clinical experience, internships, etc., must be concurrent with the academics for maximum meaningfulness.

Issues to be Resolved

Many other questions were raised. Perhaps an account of them here will be a way of expressing the "Unfinished business" of our conference. They are presented at random with no particular organization of ideas in mind.

(1) How much should TCLDs know about neurology and neuropathology? Opinions were varied as to the degree of such training necessary, but most agreed that some was useful.

(2) How should non-course aspects of the training program be designed? One program was mentioned in which "practicums" were dove-tailed with each area of course work in the sequence. Non-course items include observations, special lectures, conferences, etc., as well as typical practicums. Practicums were considered of great importance since they tend to mold the settings in which a trained teacher will be able to function best.

(3) What should be done about pre-professional training and pre-requisites to learning disabilities programs? Most participants felt a need for broad-based education at the undergraduate level, not just liberal arts, but some exposure to education and various types of special education. Then the specialization at the Master's level could be intense.

(4) How do we train teachers to communicate with other professionals? This is often an important function which is left to chance and ultimately hinders the individual in on-the-job success.

(5) Should there be differential training for TCLDs according to age level or type of learning disability with which they will work? For example, some may be trained to work only with pre-school age, or some may be trained to work only with dyslexics, etc.

(6) How long should a training program be? Our deliberations assumed no time frame. We considered only the competencies and roles.

(7) How should programs be evaluated? This was an issue that was felt to be worthy of further discussion. It was assumed that each program should make periodic evaluations of itself, with a preconceived plan for such re-evaluation.

GROUP REPORT--ROBERT RIDGWAY, CHAIRMAN

Participants--Vilma Falck, Laura Ganoung, Corrine E. Kass, Robert Ridgway (Chairman), Robert Russell, David B. Ryckman, David A. Sabatino, Ray Simches, Louis Stoia, Gerald Wallace, Douglas E. Wiseman, Naomi Zigmond

The participants in this discussion group represented diverse backgrounds, programs in differing stages of development, and working environments quite varied in nature. It was no problem to encourage discussion and to develop lines of thought. Willingness to explore, extend, postulate, extropolate, was quite evident as a group characteristic. Since the field of learning disabilities is still in its early stages, issues abound; and no one person has sufficient experience or expertness to take a dogmatic position and back it up with hard data. Thus all statements of the group members seen as tentative outlines of current thinking, subject to modifications as more becomes known about the field. It is hoped that the readers of this report will accept these statements in the same spirit which existed within the group at the time the statements were made.

The group agreed at the outset to accept the definition of L.D. which was developed at the National Conference at Northwestern. It was felt that the characteristics of the child with a learning disability should be discussed only in terms of relationships to the role of the L.D. teacher.

Children who come to the attention of the classroom teacher because of problems with the learning process fall into three categories:

1. Those whose problem is one of rate of learning or rate of development. Such children can be accommodated by the classroom teacher in the regular classroom by simple changes in program (accompanied by a corresponding change in the expectations of the teacher).
2. Those who need re-teaching. These are the remedial cases who need to go back through some learning

experiences or who need a different approach than the one used during the initial learning effort.

3. Those who have a specific learning disability. These are the children who need the full diagnostic skills and the instructional competencies of the trained L.D. specialist.

The teacher with adequate preparation to be of help to a child in the first category would not be of aid to a child in category 2 or 3. The remedial teacher who would succeed with a youngster in the second category would have inadequate skills to deal with a child in the third. In other words, children with severe problems need teachers with a great deal of special preparation. The make-up of a program to provide this preparation and the organization of a system to help the L.D. child were the subjects of the balance of the discussion sessions.

Role of the L.D. Specialist

As discussion proceeded it became clear that it would be more profitable to deal with several possible roles for professionals and sub-professionals in the field rather than to focus on a single pattern of activity for an L.D. specialist who would be trained to serve in any and all roles. One useful delineation of roles in learning disabilities follows.

1. referrers - elementary teachers, school psychologists, nursery school teachers, pediatricians.

Leaders in the field of learning disabilities must provide information programs which will enable the referring group to become more aware of behavior which is indicative of learning disabilities. Again, we have a situation where special education must share some of its knowledge with regular education.

2. Selectors (screeners) - members of a clinical team including a psychologist, a social case worker, a special educator and a clinically trained teacher. (It is recognized that in some instances the L.D. teacher will of necessity be her own selector).

Research is needed if we are to be able to improve our techniques for selecting youngsters for the L.D. program. Overselection represents a waste of scarce manpower, while failure to select those who are in need of help represents an indefensible waste of human potential. Part of our training efforts must be directed toward the clinical people who serve in this role.

3. Analyzers - highly trained experts in L.D. who can determine exactly what problems exist.

This role represents the highest level of training in the field. The clinical team will have identified the child, but the specialist must have such a thorough knowledge of the learning process that he can identify the specific difficulties, the levels of development attained by the child, and the appropriate steps to be taken to alleviate the situation.

His skill in educational and psychological testing will enable him to gain the required information. Then he must call upon his knowledge of the sequential characteristics of programs in reading, oral language, spelling, number concepts, etc., so that he can pinpoint the appropriate behavior which needs to be developed in the child. He is skilled in working with children and can test his hypotheses concerning specific disabilities by clinical teaching when this is appropriate.

4. Program developers - experts with methods and materials who can prescribe a program to fit a child's needs.

The program developer has a thorough background in instructional materials and in methodology. He stays in close contact with the Special Education Instructional Materials Center network in order to know of all current developments in instructional media and instructional processes. He writes an educational prescription based on the information available from the analyzer and tests the prescription to be certain that it is appropriate and adequate. He maintains close and continuous communication with the person acting in the fifth role.

5. Implementors - L.D. teachers, tutors, regular classroom teachers with a high level of proficiency, paraprofessionals with specific skills.

The implementor understands and follows educational prescriptions. At the level of the technician, he can assist the L.D. child to develop a particular target behavior. At higher levels, he carries on a continuous process of diagnosis and prescriptive teaching, corrdinates with ancillary services, communicates with parents, and when appropriate works cooperatively with the classroom teacher. In short, this is the "work level". The implementor works from a base of data which he continuously collects from the child. When a prescribed program is not producing results, the program developer is contacted and alternate procedures are developed.

Please note that the above list does not represent a hierarchy. The delineation is proposed as a way to promote greater efficiency in utilizing the small number of well-trained people available to us. For instance, the person filling role No. 3 could obviously perform well in either of the first two roles, but it would be a waste of his time and talents for him to do so. We have greater needs than for him to expend his efforts screening potential participants in a L.D. program.

The Training Program

For the present, the group feels that a university based program for preparation of the L.D. specialist should include the following:

- Competency in regular education
- A frame of reference (theory) for L.D.
- Knowledge of the characteristics of L.D.
- Competence in diagnosis and assessment
- Complete familiarization with methods and materials
- Exposure to L.D. children through a long-term practicum or internship (both clinical and public school experience are necessary)

Knowledge of psychological functioning (particularly perception and cognition)

Understanding of language development and language disorders

Skills in educational management

Ability to assist others (parents other teachers, ancillary personnel) in developing competence in behavior management

Knowledge of community resources and practice in utilizing them

Supervisory skills and competence in working with parents and other adults

The heart of the program of preparation is the practicum. Opportunity to interact with children with learning disorders is invaluable, and must be provided both in clinical settings and in public school situations. Differences in opinion exist about the proper sequencing of theory and practice and about the relationship between practicums in remediation and in diagnosis. The predominant view can be outlined as follows:

Theory should be learned concurrently with practicums

Directed observation is the most efficient way to learn how to watch children

Remedial work is more easily learned, so initial practicum experience should be in this area (working with children previously evaluated by more advanced students)

Diagnosis and analysis can be included in practicum experience during the second semester of the graduate student's first year.

Advanced practicum experience should include tutorial, itinerant and L.D. classroom work with children

The advanced student who is going to become an educational manager must develop proficiency in the systematic analysis of instructional materials

Persons at the para-professional level could be trained to remediate only certain types of L.D. problems or to evaluate only certain areas of behavior

It is obvious that the L.D. specialist in most situations is currently assisting with the selection process and is carrying out the roles of the analyzer, the program developer and the implementor. As more personnel become available, as we develop programs with a higher degree of sophistication, and as we begin to understand the appropriate roles of paraprofessionals we can look toward greater differentiation of responsibilities. Our training programs, whether at the university level or at the in-service level, will begin to focus on specific role elements.

Public school people are telling the universities that they do not have time to wait for everyone in L.D. to be trained to the same level of competence. Nor would they have the funds to pay such highly prepared staff in sufficient numbers to serve all the children who need help. Training programs are being asked to prepare some technicians and other persons who have limited specialization. Such persons could perform some of the implementation roles in the total L.D. program.

Program Implementation

Implementation of an L.D. program can occur with varying levels of intervention. In the order of increasing deviation from the normal school program these are:

1. Special accommodation within the traditional classroom. The regular classroom teacher would be acting as the L.D. implementor with the advice and support of a program developer (methods and materials specialist).
2. Assignment to a resource room. The L.D. child would spend a part of the day in a special class with a L.D. specialist. The major part of his school program would be carried on in the regular classroom, however.
3. Placement with a tutor (itinerant teacher). A portion of the schoolday would be spent on a one-to-one basis with a specialist. In some instances the tutor could be a para-professional with special competence in a single process or in a related group of processes; in other instances a fully trained L.D. specialist.
4. Full-time assignment to a L.D. room. The entire school experience of the child would take place in a special classroom.

The program for the preparation of L.D. personnel must be designed to prepare the specialist for work in one or more of these situations. Practicum experiences appropriate to each of the roles should be available to the student during his training period.

Tidbits from Tucson

In any discussion, many "gems of wisdom" come to light which do not necessarily fit into a logical outline of the material discussed. Some of these are asides which may not even be heard by the entire group. Some are out of context, but seem important enough to pass on to other professionals.

The items listed below range from the profound to the trivial. Most of them probably will show up in the notes taken by participants in our discussion group. We pass them on to you as "Tidbits from Tucson."

People cannot be everything at once.

Problems of internal integration are not dealt with by behavior management.

Poor feedback procedures can cause problems for a child.

Automatic, habitual activity will predominate over sensory differences.

Educational management requires thorough training in specific and systematic analysis of materials.

One of the major functions of the L.D. specialist is coordinating.

In undergraduate courses it is difficult to understand the processes of teaching, much less understand ourselves and our roles with children.

It is easy for people to get locked in to ways of doing things. There is the danger of developing a "cookbook" approach.

Teaching a concept is quite different from teaching a skill.

"We will help the classroom teacher" is a very glib statement made by many L.D. specialists. But how often do they really pay off?

The public schools just can't wait for you college people to train enough L.D. specialists. We have to get busy and train our own.

The main element being left out of our work with L.D. children is communicating what is being done (communicating to the classroom teacher, the school psychologist, the parent).

Habitual automatic processes must be learned mechanically until they blend into smooth stereotypes.

The teacher has to change before the child can.

Parents often need help in management on a L.D. child, particularly after a few years of frustration for the child in a school setting.

Labeling often comes with legislative programs. We then proceed to create the newly labeled group.

The reality of the situation is that the child must learn to read and write to exist in our social situation. He has to face this reality.

GROUP REPORT--MARGARET SCHEFFELIN, CHAIRMAN

Participants--Louise Appell, Barbara Bateman, George Brabner, John Dodd, Larry Faas, Bob Greer, Earl Heath, Ray Kleuver, Margaret Scheffelin (Chairman), Robert Strong, John Wissink (Doctoral Assistant), William Wolking, and Empress Zedler

Introduction

Our participants came from a variety of types of service and training institutions. The LD training programs represented ranged along a number of attributes: age, size, level, concepts of incidence, and etiology in learning disabilities and theoretical emphases. Some participants had received training specifically oriented toward Learning Disability. Others had learned on their own. All were willing to listen to diverging points of view. The deliberations of our group can be characterized as collaborative, cooperative, courteous, and exploratory; with honesty toward the issues and courtesy toward the personalities.

A number of assumptions and limitations were immediately adopted.

- The level of training of the teachers under discussion was assumed to be the fifth year, but not necessarily the master's program.

- The roles and functions to be described are those functions which are now performed by teachers giving direct service to children.

- Discussion of the target population or the characteristics of the pupils was not allowed.

- Ground rules were adopted to facilitate the expression of as many ideas as possible.

Practice in discrimination that which is wanted from that which is not wanted in group discussions.

Wanted	(How will we know?)	Not Wanted	(How will we know?)
Accept all ideas	("Here is what is said...")	Discussion of any ideas	("We tried that and... it didn't work...it worked.")
Exhibit all ideas	("Here is another way.")	Keeping ideas quiet.	("----------------")
		Whispering to neighbors.	("Psst...hmmm...")

The topics discussed at the Institute are presented in three sections: Functions & Roles of the Learning Disabilities Teacher, Implications for Training Programs, and Issues in the Learning Disabilities Field.

Section One: Functions and Roles of the LD Teacher

I. Specific

During the original listing at the Institute of the roles and functions of learning disability teachers, no attempt was made to categorize them. For purposes of this report, the list has been categorized, drawing upon the categorization suggested before the Institute by Dr. Bob Greer, with the addition of "Professional" and "Individual" and expansion of "Community" to "School-Home-Community."

The roles and functions are presented under six main headings: Diagnostician, Media Specialist, Classroom Teacher, School-Home-Community Worker, Professional, and Individual. It will be noted that some functions are listed under dual or triple headings, for example, Diagnostician-School-Home-Community Worker. It may well be that these double and triple functions are those to which we learning disability teacher trainers primarily need to address ourselves.

Diagnostician:

Selects and administers testing instruments

Media Specialist:

Knows and collects materials
Knows the goals of materials and how to use them
Develops new materials

Classroom Teacher:

Gives feeling of hope to students
Corrects student's errors
Plans individual programs for students
Teaches
Does clinical teaching
Teaches in hospitals
Works with contigency management principles
Serves as an actor or actress
Presents instruction in school subjects and in tasks such as attending, listening and speaking
Conducts field trips
Helps children check their own products

School-Home-Community Worker:

Works with parents
Performs administrative functions and meets with administrators
Interprets reports, sometimes with stange vocabularies
Performs with limited equipment
Works with auxiliary personnel
Presents needs to directors and other administrators; for instance, justifying the budget
Participates with others on the staff in many housekeeping chores
Orders supplies
Serves on committees
Knows school routines
Acts as liason between the referring community agencies and school

Professional:

Attends both professional LD and all-school meetings, learns new ideas
Entertains consultants
Sets models for behavior
Is led to forget role as a teacher and called on to be pseudo psychologist-neurologist

Attributes knowledge to other professions which they do not claim
Often has minimal amount of knowledge of LD due to the new field and lack of training programs
Participates in action research; others often design it
Serves in public relation[illegible]
Reads professional journals and books
Attends university classes
Is seen as the "expert"
Is expected to know everything
Is involved in teacher training
Helps write grant proposals
Tries to get raises
Is familiar with controversial concepts

Individual:

Remains personally optimistic
Remains flexible to adjust to changing situations
Has a life of his or her own outside the school

Diagnostician - Classroom Teacher:

Collects, maintains, and stores data by writing down and by memory
Knows how to record continuous performance data

School-Home-Community Worker - Professional:

Is called upon to speak at PTA's on "the new field"
Reports to other professionals
Participates in selection of students
"Looks" at other children in other classrooms who may be having problems
Influences others' perception of her or his own child
Conducts and attends inservice workshops
Has to defend what he or she does because of the new field
Is involved in inservice training for other teachers
Defends his or her students
Tries to educate other teachers about which kind of children he or she can help
Copes with medication

School-Home-Community Worker - Classroom Teacher - Professional:

Copes with crises; for example, lunch money, "grand mal" seizures
Counsels other teachers in nonclassroom situations
Supervises student teachers
Works with "regular" classroom pupils and teachers
Consults with "returning" child's teacher

Classroom Teacher - Professional:

Helps child to interpret himself to himself and to other teachers
Develops or adapts his own curriculum
Manipulates an array of technological instruments
Translates theory into practice
Plans educational programs for child

Diagnostician - Classroom Teacher - Professional:

Builds on strengths as well as works on deficits
Plans educational programs for child

Diagnostician - Media Specialist - Classroom Teacher - Professional:

Uses materials based on previous assessments of pupils

Individual - Classroom Teacher:

Teaches individual students and/or groups
Smiles
Rewards
Motivates
Speaks to children
Listens to pupils

Individual - Classroom Teacher - Professional:

Dress appropriately

II. General (abstracted from discussions at the Institute)

A. Direct service to children

1. Assessment
2. Intervention
3. Teaching of content
4. Evaluation

B. Supportive services to children and teachers
C. Administrative services
D. Dissemination

Section Two: Implications for Training Programs

Time Phases and Locus of Requirements in Training

——— Time ———→

Pre-Service | In-Service

High School	First through Fourth Year of College or University Work	Fifth Year - The year with which the institute was concerned	
	1 2 3	4 5 6	7

1 - Entrance requirements
2 - Requirements to enter teaching training
3 - Graduation requirements
4 - Program requirements
5 - Pre-requisites
6 - (If student is also working toward Master's degree, Master's degree requirements)
7 - Teacher certification requirements of state in which student expects to work

I. Description of terminal instructional competencies expected of teachers in training

  A. Observing pupils
  B. Specifying terminal instructional objectives (may be stated in behavioral terms)
  C. Recording data
  D. Analyzing data
  E. Selecting intervention strategies
  F. Teaching
  G. Re-cycling (at whatever step is indicated, A through F)

Since one of the keys to the training of teachers seemed to be the general topic "data," much discussion centered around the idea of data and the gathering of data in which there is the observation, recording and reporting of behavior usually with the objective of noticing or recording change in pupil or student behavior over time. Several questions were brought up:

1. How do you know that change has occurred?

2. How do you know that the data has been recorded, or that two people would record the data in the same way?

It was decided that the supervisor of the student must also have observed the behavior being recorded as data. Various means for teaching students to gather data were described, such as direct observation, watching and listening to a video tape, and the use of devices such as wrist counters to aid in the recording of data. During the discussion of interpreting data and of the use of terms such as "target behavior", there was general agreement on three points.

1. That all teachers and teacher trainers use data
2. That there are many languages in which both the data and use of data is communicated
3. That all teachers of learning disability children must be competent in observing and recording data

It was further suggested that the student must observe and analyze both the product and the process of the pupil's learning. In order to accomplish some of the goals it was suggested that the student observer might observe one unreferred child to each referred child. In this way the teacher in training could realize that at times the same behavior is exhibited by both unreferred children and referred children.

It was generally agreed that we had specified some of the "whats" of the question--what does the teacher of learning disability children do? Next the group attempted to specify the "whats" and "hows" of the question "How does one develop competency in teachers in training?" It was immediately recognized that terminal instructional competencies for learning disability teachers could perhaps be accomplished in the same recycling six-step system which had been discussed and developed for teaching the children--that is, observe with a specific objective for instruction, record the data, analyze the data, and select intervention and plan to teach on the basis of items one through four, then recycle through evaluation, again recording data, interpreting and analyzing and feeding it back continually into the system at whatever point was appropriate. (It is recognized that there are differences between teaching children and teaching college students. Editor's note.)

The entry level of the students or the teacher in training was recognized as an important basis for individual planning since it was agreed that there are individual differences in the students coming into a program for training teachers just as there are individual differences in the children whom the teacher is being trained to serve.

II. Five means of developing instructional competencies

A. Socratic, or guided discovery
B. Lecture, or "Listen and do what I tell you to do"
C. "Review of literature," or "Here's what the experts have said is to be done."
D. Short-term supervised teaching (variations of micro-teaching)
E. Modeling of Master Teacher, whether of pupils or of college students

III. Criteria used in evaluating trainee competence and training programs

- A. Quality control
- B. Setting goals
- C. Deciding when goals are reached

IV. Five broad theoretical emphases in the field; all overlapping to some extent.

- A. Behavioral: based on data
- B. Psychological process: works on remediating deficits as well as working with strengths
- C. Developmental: works on a sequence of development of sensory-motor, perceptual, and cognitive abilities
- D. Social-emotional: accent may be on gaining rapport at first
- E. Language development: works on processes in oral and graphic expressive language and in auditory and visual (reading) receptive language

Some names of the people who have been closely associated with each of these emphases are:

- A. Frank Hewett, Siegfried Engleman, and Sidney Bijou
- B. Samuel Kirk, Corrine Kass, James Chalfant, and Marianne Frostig
- C. Kephart, Getman, Doman and Delecato, and Piaget
- D. Sheldon Rappaport
- E. Helmer Myklebust and Doris Johnson

V. Trends in the Learning Disability field which have implications for training programs.

- A. Equipment for future training programs
  - 1. Micro-teaching: the instant or delayed replay by video-audio tape of a short term instructional situation, for the benefit of the student teacher and/or the supervisor.
  - 2. "Hardware": machinery or equipment for the presentation of instructional stimuli, such as an item that was new to many of the participants, a video casette player which would reproduce a looped video tape.
  - 3. "Software": contents of a film or other kinds of instructional stimuli which were presented to the student. Software can take many forms, from the printed book of programmed instructional materials, to the audio tape which is used on a tape recorder (the recorder here being the hardware) to the already printed and recorded cards for a Language Master.
- B. Awareness of trend toward differentiated staffing
  - 1. Instructors in training programs
  - 2. Teachers in public schools

VI. Perceived needs as seen by participants for themselves and for the field of learning disabilities.

- A. Needs for field
  - 1. Workshop on precision teaching

2. Controlled (prepared by unbiased third parties) research studies of efficacies of motor-perceptual training, as reflected in language learning change.
3. Would like to see a marathon type session planned where we could stop being polite to each other to the extent that we thrash out some of our conflicting beliefs about various remedial techniques and theoretical positions.
4. Survey of what's happening internationally. Bring in Europeans, Japanese, etc. to discuss developments in their areas.
5. Presentation by persons representing particular viewpoints. Provide opportunities for direct comparison of their actual behaviors. Opportunities to learn skill from those same persons.
6. Debates set up to thoroughly expose particular viewpoints.
7. Continuation of institutes of this kind for a longer period of time with team to work on very specific goals.
8. Application of contingency management techniques to problems of retarded (or L.D. children)

B. Needs for self

1. Demonstrations on the lastest teaching machines and programs of instruction for teaching elementary reading, language, and arithmetic.
2. Latest scoop on task analyses of reading and language. For example, the work of the Learning Center at Pittsburgh.
3. Latest work on behavior modification approaches to teaching reading.
4. Instruction in behavioral modification.
5. Exchange of practical ideas in administration of college programs and teachers of administrators.
6. Training trainers. I would like to observe Barbara Bateman demonstrate over a three week period change in language behavior of a child (children) with S.L.D. Data collecting, etc.
7. I would like to participate in a program that utilized the micro teaching technique in which my own eclectic approach would be video-taped and I could have the opportunity to view the tape in the company of my colleagues who would analyze and criticize in a merciless fashion my performance.
8. An Instructional Material Specialist to review new developments in field.
9. Survey of methods taught in various programs in universities throughout the country.
10. Presentations on particular programs--including very specific information about practicums and other program details. Mammoth media program--with demonstrations.

11. Presentation on "natural science approach" to problems of exceptional children (S. Bijou).
12. Implications for teacher training of having program based on clinical model or behavioral model.

C. Needs for self and field
  1. Mager's and others' approach to teaching teachers how to unite behavioral objectives.
  2. Discussion of various theories--esp. overlap, hierarchy of utilization.
  3. Current researchers explaining projects and meanings.

D. Unclassified Needs
  1. An informal professional communication channel between teacher trainers.
  2. A liberalization of the definition of L.D. with a de-emphasis on central nervous system variable.
  3. I'd like to see the Task Force II report published.
  4. Increased emphasis on use of machine presented programs with L.D. kids.
  5. Would like to see the techniques developed and developing in the learning disabilities field sold to (that means more than made available to) all education, including education of M.R., O.H., E.D., sensory-deficit, etc.
  6. Better communication--monthly newsletter, etc.
  7. Inter-campus visitations on organized basis.
  8. Newsletter, informal communication device--"an anything goes kind."
  9. Some sort of national certification development.
  10. Specific assessment methodologies, e.g. Gillingham method of teaching reading; association method of teaching language to learning impaired, etc.
  11. Specific curriculum planning strategies, e.g., programming instructional sequences, Skinner, Glaser, etc.
  12. Demonstrations of new materials, accompanied by proof of validity.
  13. Techniques of task analysis, e.g., application of factor analysis to instructional tasks.
  14. Precision teaching demonstration--(Lindsley or associate)
  15. Session on how to define instructional objectives (a la Mager).
  16. I would like to observe: 1) behavior modification approaches 2) precision teaching, 3) new classroom procedures, 4) a field teaching training program.
  17. Techniques of programming, precision teaching (Lindsley) behavior simulation, and demonstration of innovative techniques and teaching models.

VI. Recommendations of the working group
  A. Post-doctoral fellowships and traveling scholarships.
  B. Exchange among participants of typical course content and topic areas to be covered.
  C. An unofficial newsletter.

Section Three: Issues Raised in the Learning Disabilities Field, Before and During the Institute.

Each participant submitted a paper before the Institute began. The issues thus raised were abstracted, circulated and are reprinted here in five categories: Philosophy, Dissemination, Training, Service, and Research. During the Institute the group aired its concerns on issues in the field of Learning Disabilities. These concerns have been categorized in the same manner and appear directly after those raised before the Institute. It is clear that each category could form the basis for a separate Advanced Institute.

I. Philosophy

   A. Before the Institute

      1. Conceptualization and definition of learning disorders--three papers.
      2. Should we work on "cause," "correlate" or "functional relationships among external variables?"
      3. The need for a generalist at the doctoral level versus a team approach: implications for training programs, departmentalization, medical aspects, and multi-theory basis.
      4. Boundaries of the field--to draw or not to draw lines.
      5. Heterogeneity in learning disabilities.
      6. Theoretical and research foundations of learning disabilities.
      7. Incidence. It was noted that three papers mentioned an estimate of the percentage of all pupils who might be considered to have learning disabilities. One estimate was from 5 to 30 percent; the second estimate was from 15 to 20 percent; and the third estimate was 30 percent. In addition, one paper mentioned the possibility of multiple handicaps of a child with learning disabilities.

   B. During the Institute
      1. Should all teachers be learning disability teachers?
      2. Should all teachers have some knowledge and competencies in the techniques that have been developed for learning disabilities?
      3. Is the present teacher education model working?
      4. Possibly a change is needed from the disease or medical model to behavioral model of learning disabilities.

II. Dissemination
   A. Before the Institute
      1. Disseminate knowledge and techniques of learning disabilities to teachers of all children - three papers.
   B. After the Institute
      1. How to disseminate this body of knowledge concerning learning disabilities to the general educational system, primarily elementary education?

III. Training
   A. Before the Institute

1. Training (early direct experience, core special education curriculum, direct observation of others and one's self)--two papers.
2. The role and training of resource teachers in sparsely populated areas.
3. The roles of teachers of children with learning disabilities and implications for training programs: papers; community worker; classroom teachers--two papers.
4. Cross-train general and special educators.
5. The role of the teacher as a general educator of children with a low level of linguistic skills, not a specialist.
6. The teacher as an educational evaluator.
7. The teacher as an administrator.

B. During the Institute

1. Arbitrariness in funding and withdrawing of funds has caused certain research projects to not be followed to their conclusions.
2. Elementary education teachers in at least one university are now taking courses in the learning disabilities field. However, this presents a tremendous overload for the learning disabilities teacher training staff.
3. Program development in a college or university is sometimes hampered by organizational and jurisdictional disputes. For instance, which division or department should handle what courses and what content should be offered?
4. How can we improve ourselves, the teacher trainers, as teachers of children with learning disabilities?
5. How do we get funds for additional training and funds for developing adequate training programs, more or better qualified staff?
6. What should be the curriculum for training programs?
7. Can video tape be used to train undergraduate and graduate students with master or critic teachers?
8. Can a teacher be trained in one year to deal with pupils from age 3 to 18?
9. The core of a learning disabilities teacher training program ought to be diagnosis and programming for children with learning problems.
10. Many methods of teaching exist. More than one method should be taught to all teachers.
11. Speech therapists can also be trained in learning disabilities. In their pre-professional training programs speech therapists may obtain basic knowledge and skills for teaching children with total communicative process which includes reading, written spelling and arithmetic as well as speech and the understanding of speech. Speech therapists may then provide effective support for pupils with learning disabilities. The training program for teachers of the mentally retarded could be strongly oriented in remedial procedures for learning disabilities. (This section has been expanded by Dr. Zedler.)

IV. Service
  A. Before the Institute
    1. Children are not learning but can be taught to learn.
    2. General strategies for dealing with learning disorders (individualization, prevention, and technology.)
    3. Changes in laws and operations of public school: financing, administration, diagnosis, certification, and teacher certification; federal and state legislation, placement; role of parent organization; role of learning disabilities in the total school program.
    4. Inservice training of teacher-trainers.
    5. Early detection for prevention of learning disabilities.
    6. Emphasis on remediation.
  B. During the Institute
    1. How can we keep children in the mainstream of education and not separate or segregate them?
    2. How to reorient presently functioning teachers, that is inservice as well as preservice training?
    3. What can be done about certification of LD teachers?
      a. California's steps toward certification of teachers for pupils with learning or behavior disorders or both.
        1. Accent on educational relevance of learning and behavior disorders. (Educational handicap)
        2. Guided participation with children at all stages.
        3. Specific content areas of competence.

V. Research
  A. Before the Institute
    No papers raised research issues.
  B. During the Institute
    It is interesting to note that the group did not allow itself to be diverted into research issues.

APPENDIX A

REFLECTIONS AND COMMENTS BY THE "ELDER STATESMEN"

Lecture - Dr. William Cruickshank

Dr. Kass, Dr. Ridgway, Institute participants, associates at this table, ladies and gentlemen. On an occasion as this it is important to look back to another day as well as forward. Dr. Kass, in inviting us to participate in this very remarkable Institute, asked us to talk about our work in the area of learning disabilities. For me this is a very difficult assignment, because whatever work I have been engaged in in this field has been as the result of someone else's influence or in cooperation with others, and thus I feel, in taking on the assignment that Dr. Kass has given us, I must reflect in part these other influences on my work.

Consider that thirty years ago when my career started there were essentially two men in the United States who were pioneering in the area of what we now loosely speak of as learning disabilities. When we compare this with the international thrust which has been developed one cannot help be content and be satisfied that one has had a part in the phenomenal growth which has taken place.

If compliments in part are extended to me today for my part in this yet-to-be-consummated movement, I must point out that the inspiration of whatsoever has been accomplished under my direction or guidance, is and has always been simulated by Heinz Werner and by Alfred Strauss with whom as a very young and very immature person I had the occasion to be associated during my formative years and who through their lifetimes constantly through correspondence, long telephone conversations, and personal visits continued to stimulate and to guide, to suggest, indeed to encourage, and often to inspire me. These two men need to be recognized in a setting such as this Institute. Dramatically opposite in almost every characteristic, introspective in their scientific method, content with the studying of the behavior of a single child in contradistinction to the trends of objective psychology of their day. Humanists, par excellence, these men above all others taught me the value of human life and the potential of a disadvantaged and damaged organism.

Their contribution, indeed the initial contribution to the to-be-developed fund of knowledge about exogenous retarded children, stimulated me in ways which cannot be easily measured. They taught me the value of being a student, and of maintaining a constant inquisitiveness into the complexities of human beings.

They taught me the importance of great men, powerful in thought, and compassionate in the presence of immaturity, of being genuinely concerned for and interested in youngsters. They taught me the importance of seeking power and potential in my students and in the nurturing of these qualities to the end independent action could be taken by my students. Heinz Werner in his silence was profound. Alfred Strauss in his allocentricity was also profound and together these men laid down the "warp and woof" of a major national fabric, within which each one of us here in this auditorium today is now thoroughly enmeshed.

They worked with mentally retarded children. The tragedy, in my perspective, of today's national and state organizations for children's learning disabilities is the almost total disregard of exogenous mental retardation out of which most of what we know of children's learning disabilities originally came, but this will change, for it is inevitable that all children, regardless of mental capacity, will be served. My work has essentially been that and the result of work by very treasured students.

The first attempt to apply the Strauss-Werner knowledge of exogenous mental retardation to those of normal intelligence occurred under my direction in the studies of Dr. Jane Dolphin-Courtney, now in Florida. These studies on cerebral palsied children indicated that the psychopathology of the exogenous retarded child was present in kind and in degree with normal and intellectually normal cerebral palsied children. Dr. Merville Shaw of California as a doctoral candidate of mine extended these investigations to idiopathic epileptic children; Dr. Howard Norris of Queens College, to the organic type deaf child; Dr. Matthew Trippe, now one of my valued colleagues at the University of Michigan, to a further understanding of the cerebral palsied. These studies of my students, each of whom has taken his stance with credit in places throughout the United States, stimulated me to enter into extensive research on the psychopathology of cerebral palsy with Dr. Harry V. Bice and two more students, Dr. Norman E. Wallen, now of California, and Mrs. Karen Lynch of Pennsylvania.

These latter studies of large and homogeneous populations served to crystallize our thinking of a decade regarding not only what these children are like but also what must be done to provide a profitable learning experience for them. The Bice and Wallen cooperation, perhaps the best learning experience I had had to that date, propelled us to look with care at brain-injured children who showed psychopathology but no major motor problem, the sensory hyperactive group of children, and to try to conceptualize an educational model pertinent to observed psychopathology. Educational explorations followed, with Marion Tannhauser, Frederick Ratzberg and Francis Bentzen,and these were followed by explorations into ways of transmitting our ideas into teacher preparation programs.

Here again remarkable students, who became colleagues, served to stimulate me and to help me maintain reason and balance in our deliberations and work, and who more often outshown their professor. Chief among this group of students are Dr. Eleanore Westhead of Virginia, Dr. John B. Junkala of Massachusetts, Dr. James L. Paul of North Carolina, Dr. David Lema of Ohio, Drs. Andrew Shotick and Kathryn Blake of Georgia, and Dr. Jean Hebeler of Maryland. Another student Dr. Norris Haring of Washington, carried our concepts of stimuli reduction, of structure and of environmental modification to the emotionally disturbed child, and taught me the importance of expanding my earlier understanding of the meaning of perception and its application to the hyperactive emotionally disturbed child and to those where a diagnosis of neurological insult was not always possible.

Once upon a time Dr. Francis E. Lord, another who is significant in forming my career and for whom I worked as an undergraduate freshman, introduced me at a dinner. He commented in his introduction upon my writing, and said he didn't know if he should introduce me as "Cruickshank, or Cruickshank and others." I treasure that comment because it is perceptive of my way of working. No man in special education can know enough to work totally alone. As a professor, I have always felt it a duty and obligation to work with, to investigate jointly, and to publish with students who are yet to make their mark. If this policy has been helpful to them, it has more than justified the effort and the greater award has been mine.

The concerns which I have about my research and about my writing are many, and it is left for us in years to come as it is to you to refine, corroborate, or to refute most of that which is now assumption and supposition. My studies have been cross-sectional; they need to be longitudinal. My work has been clinical, and from it behaviorable observations and truisms appear to me which may not be equally clear to others. It needs now to be made experimental, controlled, and subject to duplication. My studies, under the available circumstances, have employed teachers and children who are variable, who are inconsistant in their behavior, different in their backgrounds, and in general of such diverse characteristics as to make research generalizations very risky. We have made those generalizations; we have recognized the risk in doing so.

Research is needed now to be submitted to control and technology which will minimize these human variables and show learning disability for what it truly is. The value of clinical study and observation, however, cannot be minimized, and should not be. Such study is the germ of humanism if not scientific accuracy. We can never in this age lose the concept of human warmth and empathy, for in these qualities lie the essence of teaching and learning.

To the future we look, but where? My three decades of concern about these children have led me to know that the solution of the problem is not to be found alone in education. Learning disability is neurological, physical, and cellular. Let us not forget this basic fact, for it is a truism and it should be the rock upon which all else in this field is built. I challenge you who are here, therefore, to expand your reading and your knowledge of the field of nutrition, for example. Is the answer to some of our problems of learning disability in the prenatal nutritional deficiency? Look to biochemistry. Send your students to neurophysiology and to genetics, to psychogenetics, to bioengineering, and to the literature of microbiology to seek answers to learning disabilities. The developing science of holography could significantly refine neurological diagnosis and simplify our problem. Help your students to see mathematics and statistics, programming and computer sciences as their friends in the solution of our problems. Provide your students with relevancy, and provide your students with meaningful interdisciplinary exposures to the end that solutions will come out of concert with other professions, not from the solo activities of education alone.

The science of human life, one aspect of which concerns learning disability, is too complex to permit anything but consortiums of interdisciplinary knowledge and action. This is a lesson that I have learned in my professional development. Fortunately for me I have another two decades to learn. Your recognition that this learning has taken place in me is a compliment equal to few others I have received. It is a success experience of the type I have always said must be provided to children with learning disabilities and the motivating force of the next step whatever that might be. I am deeply in the debt of former teachers, researchers, faculty colleagues, and students with whatever we have accomplished to date, and now I am also in your debt for the encouraging recognition you have given me today.

Lecture - Dr. Marianne Frostig:

"The Analysis of Cognitive and Communicative Abilities"

Dear colleagues and friends. My talk is concerned with the value of the analysis of cognitive and communicative abilities. The term analysis refers to the use of a variety of methods for the purpose of isolating parts of a total phenomenon (e.g., a pattern, a society, an individual's cognitive behavior) so that each of the components can be considered separately.

Analysis of cognitive and communicative abilities can be effected by tests. The various subtests of the ITPA, the Wechsler, and the Frostig, among others, were designed to permit an analysis of a childs' cognitive and communicative abilities. While the value of such an analysis has been recognized by many of our colleagues, it has been questioned by others. The question asked most frequently has been: "Do these diagnostic or analytic tests identify processes or abilities in children that are essential to their later learning of academic subjects?" My answer to this question is emphatically affirmative, but some authors dispute this assertion, apparently hankering for the good old days when the use of the Binet test alone solved questions of etiology, of placement, and, in fact, of what the future of the child should be. They seem to subscribe to the idea that intelligence is a unitary function, measurable by a single score, a notion to which Binet himself did not subscribe. He believed firmly that intelligence is a multiplex of many different abilities. Guilford reports that Binet rejected Spearman's universal component g, because Binet's conception of intelligence was multivariate. Witness the following quotation which refers to children that he tested: "the mental faculties of these subjects are independent and unequal; a small memory may be associated with a large judgment; and he who proved to have a remarkable power of fixation in a test of memory can prove to be a remarkable idiot."

There is no time at this meeting to discuss the very great number of findings by research workers during the last 60 years which support Binet's contention of the complexity of intellectual functions. Unfortunately articles have recently been published whose authors are seemingly unaware of this large body of research evidence. I certainly believe that careful evaluation of the child's underlying abilities and training based on this evaluation is an important feature in the remediation of learning difficulties.

I am convinced that it is necessary to make a differential diagnosis of the child's abilities and of his total personality to enable optimal diagnosis, training and treatment to be initiated. I also want to state that it is necessary to repeat the analysis during the course of educational treatment, so that changes in the educational needs of the child may be detected and the focus of education shifted accordingly.

It is necessary to emphasize, however, that test results taken at face value, especially if single subtests are considered, are of limited assistance in developing the optimal educational program. It is rather the exploration of the relationships between the tests and subtests which is of prime importance when we use the ITPA, the Frostig, and the Wechsler, or other test combinations, to evaluate the assets and deficiencies of a child.

The child acquires knowledge about his environment through his perceptual functions, through the perception of his own actions and the actions of other---the perception of objects and their attributes---their placement or their displacement---their similarities and dissimilarities and changes in their appearance. Thus, concept formation depends upon intact perceptual functions; but concept formation depends also to a great degree on language functions, as psychologists and linguists have shown. Perception in turn depends on the early emerging sensory-motor abilities. And all of these functions---language, perception, cognition, and communicative abilities---are influenced by the child's emotional and social development. Since each developmental stage influences the others, we must necessarily view test results as reflecting a dynamic picture of interacting forces rather than a static set of disparate abilities.

Each of the abilities tested needs to be understood as the result of biological processes. No biological process occurs in isolation and independent of the functioning of the total organism. The interdependence of biological processes is readily apparent in the study of physiology: the functions of the kidney or the brain or of other organs of the body can be understood only in their interrelationships. Malfunctioning of one organ system will always be followed by malfunctioning of others. This principle applies also to psychological processes. Severe difficulties in word understanding or a disturbance of figure-ground perception, or a centrally caused motor difficulty, rarely if ever, occur as isolated symptoms. Nevertheless, it is incorrect to believe that an attempt to isolate these abilities is a futile academic exercise. To again use a physiological analogy; the hypophysis (pituitary) secretes certain hormones in response to chemical stimulation originating in the gonads and vice versa. In the same way psychological functions influence each other. But just as the physician has to know if gonadatropin or a hypophysectomy will be necessary to improve the malfunctioning of the endocrine system, so the teacher has to decide whether to focus on this or that psychological ability--on verbal expression or on visual perception or on movement training. The education of abilities must be conducted in an integrated fashion. Nevertheless, the educational attack has to be focused. For instance, with certain children with severe difficulties in visual perception, the best and most intensive language training will not help them to discriminate visually. With other children, visual perceptual training cannot help them achieve adequate auditory discrimination. As with the physician in his treatment of bodily ills, the psychologist, the educator, and the psychiatrist, have to know the main locus of the problem in order to determine the most effective treatment and obtain the optimum results. Not long ago, the applied psychologist had to be satisfied with considering very crude categories of children's abilities, such as intelligent speech and movement. We were unaware of the complexity of cognitive and communicative functions until Thorndike, Thurstone, Kelly, and Guilford, among others, became interested in the analysis and study of human abilities.

In science and in scientific application it is an unforgivable error to rely on gross classifications when finer ones are available. We cannot act like the small child who speaks of rocks; we must act like the geologist, who tests, describes, recognizes, sorts and classifies a vast array of specimens of the earth's crust.

In education we have worked for a long time with very gross categorizations, usually based on a single easily discernible attribute. These gross categorizations have been used for dividing children into groups, such as the mentally retarded or blind or physically handicapped. Once the group has been labeled, we have assumed that we can predict the learning ability of all the children in the group, and we continue to teach all the children by the same methods, with the same materials, and often even at the same rate. The history of education has shown that such groupings do not point to educational goals or define optimum methods, because they are based on an analysis of similarities and dissimilarities in the school population which are totally irrelevant to educational stratification.

It is true that the diagnostic instruments which we are using are not yet as precise as we would wish, but they do help to make appropriate remedial training possible. The use of a global nebulous assessment of g does not even indicate where to begin treatment. For this reason remediation based on a comparison of the subtest results of the ITPA or the WISC are much more useful than those based on the Binet which gives only a total score. Our clinical experience shows that the pattern of these subtests tends to persist although intensive remediation ameliorates many of the deficits. The evidence is found in retest results as well as in the child's cognitive style observed in his daily behavior.

They enable the teacher to react to the child's strengths and weaknesses in the areas of sensory-motor functions, visual and auditory perception, memory, associative abilities, expressive language, and so on. But the Binet is still used widely as the sole or main diagnostic instrument. It is strange that many educators are still more interested in prediction than in remediation. Do they feel so powerless to help a child with disabilities?

Prevention and remediation are more fruitful approaches to helping children with learning disabilities than prediction. Diagnosis which begins and ends by discriminating different groups of handicapped children does not solve many problems. Most of the children with basic disabilities suffer from multiple lags, and labeling the children according to etiological categories is often not helpful, or even not possible, because a single etiology may lead to different symptoms and vice versa a single etiology may be characterized by a diversity of symptoms.

Test results are nothing else but observations of the child under standardized conditions. They permit an analytic description of the behavior they elicit. The observed behavior of a child can be compared with that of other children and can serve the teacher as a guide to recognizing the underlying difficulties which have to be modified as well as the intact abilities which must be utilized so that the child can progress maximally in his learning. The greater the precision in diagnosis, the more effective the training procedures, as our experiences with ability training have already shown.

Let Binet, himself, speak in support: "A few philosophers seem recently to have given their moral support to these deplorable verdicts in affirming that the intelligence of an individual is a fixed quantity, a quantity which is unable to be augmented. We must protest and react against this brutal pessimism. We are going to try to demonstrate that it has no basis" (Binet, 1910, p.141).

This statement is so strongly worded that it is clear Binet regards the issue ultimately as a moral one. He is asserting a belief in the intellectual potential of the individual, and he also believes that educators have a moral obligation to help the child to reach his potential. I would like to expand further on what Binet implies, by stating that the educator also has a moral obligation to affect not only a cognitive change in the child but also a change of his values and feelings. By changing the values and feelings of children we may even change ultimately the emotional climate of our society.

Education responded with a great effort to the event of Sputnik, and succeeded in raising considerably the standards of teaching science, thus focusing on the child's cognitive ability. But it seems to me that education has responded much less emphatically to the event of My Lai, which symbolizes tragically the need for focusing on standards of moral concern, and humanistic principles. These must always be the ultimate concern of the educator. It is not sufficient merely to train academic skills, teach a curriculum, or even to focus on cognitive abilities--we cannot remain indifferent to moral issues. We must make a conscious effort to transmit to our children experiences which will make them more open and sensitive to the feeling of others. I am happy to assert that I believe we can bring about positive changes in our children and ultimately in society--and I hope that among educators the "brutal pessimists" in this regard will be few.

It has given me much comfort to find views so similar to mine so often reflected during the course of this conference. It has been a privilege as well as a pleasure to be with you. I thank you all very much.

Lecture - Dr. Newell C. Kephart

Many years ago, some of us became interested in the problems of a group of children who had difficulties in learning. We were considered a rather peculiar lot. We were called "brain injured;" we were called "perceptually handicapped;" and Sam here remembers when we were even called "other health impaired." If you were working in a university, your offices were behind closed doors in the attic of the old chemistry building. If you were working in a school system, your classroom was behind closed doors in a basement down by the furnace.

We welcomed those closed doors in those days because we didn't know what we were doing and if you don't know what you're doing, you hesitate to do it in public. People were a bit curious. They wondered who these peculiar individuals were back of those doors who were working with these corny kids, but they were not sufficiently curious to open the door, because they were only too glad that we had taken the kids out of their classes.

But we began to learn some things and we began to have some results and people began to stick their noses in the door and look at what we were doing. When they looked at us they began to say, "Johnny, in my classroom, behaves much like that youngster you have there. He's not as bad in his behavior, but I think it's the same kind of behavior you're working with behind that door." So we began to look out from behind the closed door and we discovered that learning disability was not limited to the severe cases we had been seeing.

We had rightly worked with the most severe cases, initially, because this is where the problem stands out in stark relief and you can see it. You can work with it and you can experiment with a reasonable degree of control. When we began to come out from behind the doors, however, we found that learning disability was a continuum and it had stretched all the way from very limited interferences with learning to very debilitating learning deficits.

At this point, some of us began to say, "This problem is bigger than special education. This problem involves education in general. "Some day" we said, "special education and particularly learning disabilities is going to be asked to make its contribution to education in general." We speculated that the great advancements in education in the next decade were going to come directly or indirectly from the activities in the field of learning disabilities. We said, "Special education is going to be asked to work with general education to make these kinds of things available to all children."

In my opinion, that day has now come. Conservative surveys indicate that 15-20% of the total school population suffer from learning disabilities of a sufficient degree to interfere with their academic learning. This makes the problem greater than the kinds of provision which we have been thinking about in the past. I believe we need now to look forward to the development of more extensive facilities for these children and to more variant facilities for these children.

I think of these facilities as being needed at three levels. The first level of facility is directed toward the child with a minor problem. He has much more to gain from interaction with his peers in the classroom than he has to gain from extensive activity by us in a segregated program. Therefore, he needs to be helped primarily through the regular classroom teacher. I think we must insist to general education that the basic information about learning disabilities be made available in the teacher training programs of all teachers. I believe we need to insist that, for a teacher to be considered competent in a classroom, she must know the basic problems of the child with learning disabilities and the simpler techniques for dealing with them. I believe the time has come when we, with our knowledge, can insist that this be made a part of teacher training.

We have, in addition, however, thousands of practicing teachers in classrooms over the country who need this information now. We need to turn our attention to methods of making this information available to them. It is, for this reason, that we have been interested at the Glen Haven Achievement Center in the development of an inservice training program for teachers--a program which would present an organized and integrated body of information about learning disabilities which could be delivered to the school district. I know--there are many inservice training programs already in operation. Too frequently, they represent a kind of educational smorgasbord in which you get one expert to come in over here and present a little bit of information, another expert to come in later and present another little bit of information and another expert to come in for a special session and present another piece of information. The teacher samples all of these tidbits, but nobody puts the smorgasbord together into a meal! Too frequently, the result of this kind of a program is a sort of an educational diarrhea which gives rise to a plethora of verbiage, but has a very limited effect on procedures which go on in the classroom.

We need to direct our attention to the development of organized, inservice programs designed to present an intact body of information to the classroom teacher. We must think of these programs, not as a single shot, but as a continuing activity. The day when a teacher could learn in four years in an undergraduate college all of the things that she needs to know for a lifetime in the profession has long since past. Nowhere is this more apparent than in the rapidly developing field of learning disability. I think we must consider long-range, continuing, updating, inservice training programs.

The second level of facility is directed toward the child who has a little more severe problem--whose interference with learning is such that many of the activities of the classroom become meaningless for him. He needs more intensive assistance than the classroom teacher can be expected to provide. For this type of child, I would consider a clinical approach in which he is removed from the classroom for a short period--

a half hour or an hour a day, as the case may be. During this short period, individually or in small groups of two or three, a direct intensive attack is made upon his learning problem; not upon curricular matters, but upon the learning problem itself and the methods by which he processes information.

This level of facility is essentially unexplored. We do some of it in terms of programs in speech and language; we do some of it in terms of remedial programs in reading and arithmetic; we do some of it in terms of the activities of psychological clinics within school systems. But the development of a learning disability clinic, in which the attack is upon the learning style of the child rather than upon curriculum or particular types of behavior, has yet, I believe, to be explored. We need to consider the type of facility and the nature of the service which could be provided in this area for this group of children with a little more severe problem.

The third level of attack is beamed at the child whose problems are severe, the so-called "hard core case"--the youngster whose interferences are so extensive that he will probably need major alterations of educational presentations for the length of his educational career. This child is best dealt with in a segregated classroom. Here is where we have devoted most of our effort. Here is where we have expended the greater amount of our attention both in terms of the development of classroom procedures and in terms of teacher training. We have not done too bad a job. I believe that we are on the way to providing adequate quantity and quality of facility for those children who need this segregated approach.

We need now to reach out into the field of general education and consider some of these less intensive and more widespread approaches: the classroom and the clinic. We should not fear this encounter with general education, because we have developed knowledge, skills, and procedures which we can offer. We should not cherish our private bailiwick, because this must be a cooperative effort. The time has come to give over the luxury of isolation. The time has come to forego endless arguments about the relative merit of minor variations in methodological procedures. The time has come to stop playing games with categories and terminology. The time has come to get on with the problem of helping children within our school systems.

I know, we do not know all the answers. I am well aware that there are gaps in our theorizing. I know that all of the empirical information is not yet in. But we know enough to begin. The problem is there right now. So while we reflect upon the accomplishments of the past, let us get on with the problem of the present. Let us concern ourselves with the design and implementation of a set of facilities--a broad set of facilities within the area of education in general--which will make available to every child with learning disabilities the help which he needs regardless of where or how it occurs within the education process.

Lecture - Dr. Samuel A. Kirk

Dr. Kass, distinguished guests, ladies and gentlemen. In requesting me to reflect and comment on my own contribution to the field of learning disabilities, the Committee is inadvertently asking me to confess my sins. I hope there is a priest in the audience who can give me absolution.

My first sin is accepting the reputed posture of an expert in mental retardation and learning disabilities. In this field, such a posture today is usually reserved for those who can show that they have taken a sequence of courses in a field and can obtain a certificate from agencies such as the State Department of Public Instruction. I must confess to you that the two areas of special education in which I have never had a college course are "mental retardation" and "learning disabilities." In these two areas, according to our present criteria for trained professional personnel, I must admit that I do not qualify. And I also have a sneaking suspicion, although I have not investigated too thoroughly, that my colleagues on this panel may be in a similar embarrassing predicament.

I have, however, had some experience. My first encounter with the problem of learning disabilities came about by accident in the early 1930's. As a graduate student at the University of Chicago I accepted a job as "resident instructor" in a residential school for deliquent retarded boys in Cook County near Chicago. Fortunately for me, in those days they did not require a special teacher's certificate.

At this school I taught in the afternoon and served as a recreational worker after school and then in the evening helped the nurses put the boys to bed and watch and see that they stayed in bed.

In reading one of the clinical folders from the then famous Institute for Juvenile Research that diagnosed these children, I noticed that one of the boys was labeled, "word blind," a term I had never heard before in my psychology courses. He was 10 years old, a non-reader, and had a recorded IQ of 82. This clinical folder referred to Marion Monroe's monograph on reading disabilities, Hinshelwood's book on Congenital Word Blindness, and Fernald's kinesthetic method. After reading these references, I arranged to tutor this boy at 10 o'clock in the evening after the boys were asleep. This boy, who was eager to learn, sneaked out of bed at the appropriate time each night and met me in a small space between the two dormitory rooms and actually, in the doorway of a boys' toilet. By making this arrangement we both knew we were violating a regulation (which is my other sin) since the head nurse had directed me not to allow the boys out of bed after 9 p.m.

After I had been tutoring the boy for two weeks, the nurse caught me teaching this boy at 10 p.m. She, consequently, gave me a dressing down with the statement that this was against regulations and that I should find time to teach him during the school day.

But since this was impossible, and since he was making such rapid progress, we just continued the remedial lessons in spite of the rules and regulations. When we heard the nurse's footsteps coming down the stairs, (she lived on the third floor and we were on the second) the boy quietly sneaked into the boys' toilet. I mention this incident in some detail because I want you to know that my first experience in remediating learning disabilities was conducted not in a school, not in a clinic, not in an experimental laboratory, but in a boys' lavatory!

In seven months' time, this boy was reading. I sent him to the Institute for Juvenile Research twenty miles away and learned through a social worker that he was reported now to be reading at the third grade level and on this basis they had obtained a parole for him from the judge of the juvenile court. I was also invited to go to the Institute for Juvenile Research in Chicago and confer with Dr. Marion Monroe on the method I used to teach him in such a short period of time. After this conference she agreed to tutor me in diagnosis and remediation of severe cases of reading disabilities.

At this time, in the early 1930's, the Wayne County Training School in Michigan was looking for a psychologist with a master's degree who was an expert in reading disabilities with the mentally retarded. With my very extensive experience of teaching two children and writing a master's thesis on the Fernald method, I was selected for the job. I mention this fact to indicate to you how few people at that time worked in this particular area.

At this institution, I found that children had many disabilities: reading disabilities, language disabilities, perceptual disabilities, and behavior disabilities. I was fortunate to have the opportunity to teach and conduct research on children with a variety of disabilities and a variety of problems.

At this time, in the early 1930's there was great emphasis on brain theory and disabilities. This was even before Strauss. Mirror reading, mixed eyedness and handedness, strephosymbolia, pathological brain dysfunctions were proposed to explain all of these aberrations. It became obvious to me that to understand all of those language, perceptual, and reading disability problems, I had to understand the workings of the brain. So, at the University of Michigan, I concentrated on courses in physiological and experimental psychology, and on neurology. I even did my doctor's thesis by testing the handedness of rats and training them to discriminate between an "F" and a mirrored "F." After surgically producing brain lesions, and retesting the rats after post-operative recovery, I made autopsies to determine the effects of brain lesions on perception and handedness and to determine whether I could change dominance and create a strephosymbolia in rats. I then proceeded to publish monographs and articles with esoteric titles such as, "Hemispheric Cerebral Dominance and Hemispheric Potentiality," or "Extra-Striate Functions in the Discrimination of Complex Visual Patterns in the Rat."

The point I wish to make after this digression into the recesses of the brain is to confess here that studying physiological psychology and neurology and my own research on the brains of rats, have had no relationship to what I did then, or have done since, or what I do now for children with learning disabilities. And it is for this reason that I am not concerned with terms of brain dysfunction or brain damage, or even with terms such as "strephosymbolia," "word blindness," "alexia," or "dyslexia" because I feel that it is more parsimonious to give a designation in behavioral terms that the child has not learned to read.

After four years at the Wayne County Training School and the University of Michigan, I acquired a union card, which in academic circles is called a Ph.D. With this handle, I was offered a job as Director of a Division of Exceptional Children at the Milwaukee State Teachers College, in 1935. Similar to the practice today at colleges and universities, that particular college had to have Ph.D.'s for accreditation whether the personnel could train teachers or not.

To learn about education and teaching, I enrolled in a practical university. At this university, my professors who taught me about education and special education, in particular, did not have Ph.D.'s. They were classroom teachers who allowed me to sit in their classes day in and day out to study and evaluate their methods and to ask naive questions. I continued in this post-doctoral college for three years in between teaching my college courses. I roamed from class to class trying to learn what different teachers were doing, and after three years of this post doctoral training by classroom teachers I gave myself a diploma since the teachers of this Practical University were not authorized to give credits or certificates.

Another of my sins harks back to about 1949 when I established the first experimental nursery school for so-called "mentally retarded children." Working with 3-5 year olds diagnosed as mentally retarded in an institution, and also in the community, we found that environmental intervention at an early age accelerated intellectual and social functioning of these children. We also found many examples of learning disabilities which, of course, were not labeled as such.

In trying to teach these young children, we were forced to look into their behavior and guess at what might have been wrong with their development, what deficits existed on each child, and to decide on what to do about these particular deficits.

The label "mentally retarded" did not help us very much. One child with marked nystagmus as a result of rubella was diagnosed as legally blind and severely mentally retarded. This child could see, but it took her a long time to recognize objects and pictures visually. She needed training in speed of perception. We had no tests at that time because Frostig was a little slow and had not yet published her perceptual tests. A program for this girl in her area of disability was highly successful since with intensive training on a tachistoscope to increase her speed of perception, the girl progressed rapidly in speed of perception and also in performance on intelligence tests. She was later placed in regular grades rather than in a class for the mentally retarded since her IQ had risen from approximately 50 at age four to about 85 at age six, and at the age of 10 she was doing adequate third grade work in a regular class in spite of all the problems that she had had earlier.

Another child with the same label "mentally retarded" and with a recorded IQ on the Binet (which was invalid) of 37, was unable to talk at the age of five. She was given intensive training in auditorization and speech. The remedial training for this girl was not visual perception, but auditory perception and verbal expression.

As we analyzed and worked with many of these children mostly on a trial and error basis, we found that each child had some peculiar block or inhibition to development. I'm sure we wasted a lot of time trying to pinpoint basic disabilities in these children and in organizing a general pre-school program which included an individualized remedial program for each child's unique obstacles to development.

To be able to analyze the communication problems of younger children at the outset or before remediation, it became necessary for us to develop tests to isolate some of these abilities and disabilities. And, I guess, this is where my other major sin took place. After fifteen years of work by a large staff, we developed the Illinois Test of Psycholinguistic Abilities. This diagnostic test was designed to isolate abilities or disabilities found in young children. The experimental edition published in 1961, that Dr. McCarthy and I turned out, became a real godsend to a lot of doctoral candidates since approximately twenty doctoral theses have been written on the ITPA. So if the test has not done anything else, it has at least earned twenty doctorate degrees for twenty people.

Unfortunately, this test has also spawned many illusions and false hopes. Some people have taken the ITPA as the instrument for the cure for all ills and the diagnosis of all problems. In spite of our numerous warnings, it is used for junior high school students even though it is for young children. Many also use it for problems for which the ITPA does not apply. Furthermore, many people want to use it without taking the time to learn how to give it. And, many people give the ITPA routinely and use it very mechanically. My sin here is to impose an instrument on the public that is very beneficial for the diagnosis of disabilities of some children within a restricted age range which some desire to use without the necessary preparation or clinical judgment. This is our common fault in all areas of learning disability because I'm sure that Dr. Kephart and Dr. Frostig and others will agree that their methods are also used with children to which their procedures do not apply.

The last sin which I shall mention publicly--I'm sure there are many others--is the small part I had in advocating the use of the term, "Learning Disabilities." Like Pandora's box, it has forced upon us many ills in spite of its many benefits. This is how it had happened. Parent groups throughout the United States who were involved in organizing programs for their children were using different terms such as "classes for brain injured children," "classes for the perceptually handicapped," or "classes for the neurologically impaired." These groups met in Chicago in April of 1963 to form a national organization. They called the conference "Exploration into the Problems of the Perceptually Handicapped Child." They invited a number of consultants including, I believe, Dr. Kephart, Dr. Myklebust and myself. Just before the meeting the chairman warned me that they were going to ask us to give them a term and a name for the association which they were planning to organize.

At this meeting I stated that if the purpose of the association is research on etiology than they ought to use a neurological term. But if their aim was services to children with disabilities, then the name should be related to education and training rather than to etiology. The focus of the name I suggested should be on behavioral assessment and special methods to ameliorate the learning disorder, the learning inhibition or the disability, whatever they wish to call it. I suggested that the term "Learning Disability" might focus attention on the learning problems and on instruction whereas the term "brain injury" would have etiological meaning but would have little or no relation to how the child is to be taught.

I did not attend their business meetings, but I understand the three common labels, "brain injury," "perceptually handicapped," and "brain injured" were discussed. They voted to call the organization the Association for Children with Learning Disabilities, which since then has grown to great proportions. Since then, the term "Learning Disabilities" has become very widely used and is included as the term in a recent congressional bill which is entitled, "The Learning Disabilities Act of 1969." Dr. Kephart and Dr. Myklebust were at that meeting and tended to agree with this term even though it may not be the best term.

But the simple solution of a name has not really been so simple. I now know that the term "Learning Disabilities" has created many problems. We have had a bandwagon effect. To some, every child has a learning disability. The prevalence figures given by different groups on congressional testimonies have ranged from 10-30%. It appeared for a while that a third of the school population could classify in this category. It has even been suggested that "mentally retarded children" be labeled "general learning disabilities" and that we can call the others "specific learning disabilities." Parents have brought their children to learning disability centers for diagnosis because their children were not obtaining straight "A's" in school. And if they were not obtaining straight "A's" and they were their children, they must have a learning disability.

This is the bandwagon effect of a new and popular concept. It is for this reason that the National Advisory Committee for Handicapped Children, of which I have had the privilege of serving as chairman, has stated that specific learning disabilities in federal legislation constitute the hard core group and consist of about 1-3% of the school population. And until research defines the other groups and their program, we might stick with that particular figure rather than to indicate that a third of the school population can be classified as "specific learning disabilities." I will need absolution for my part in committing the sin of not only helping the popularization of the term, but also delimiting its use in the field.

The title given me for this address is, "Reflections and Comments." So far I have reflected on my sins. As requested by the sponsors of this Institute, I shall make a few--shall I say--irrelevant comments.

1. Learning disabilities as a concept is not new in special education. Only the label is new. Sporadic clinical work in these areas has been one in medicine, speech pathology, reading clinics, corrective physical education, orthoptic training, communications, language disorders and other fields. Today the learning disability specialists have synthesized thee fields into workable programs for school children in schools. This has required an educational model rather than a medical model in which a child is assessed from a behavioral point of view rather than from an etiological

point of view. Consequently, the treatment of disabilities becomes focused on education and training.

2. The concept of learning disability involves what I have called intra-individual differences in contrast with inter-individual differences. This means that we have, in a sense, redefined individual differences to emphasize the comparison of Johnny's abilities and disabilities instead of just comparing Johnny with Billy for classification purposes. The general tests of intelligence are necessary but not sufficient for identifying the disability and organizing remediation to ameliorate the disabilities. As a result of this emphasis, the problems of children with learning disabilities have forced us to reject the testing instruments that do not lead to a hypothesis for remediation. To give a test such as a general intelligence test and classify a child in a particular category is not enough to help a teacher teach the child. We have, consequently, begun to invent tests that would show us discrepancies in growth--what abilities and disabilities a child has rather than just a global test score. The tests of Kephart and Frostig, Myklebust, Cruickshank,and the ITPA are not just classification tests, but tests to define for us what kind of remediation a child needs.

3. The learning disability concept has led to the concept of clinical teaching to ameliorate disabilities in children. Although we have always given lipservice to individualization of instruction we have always continued mass education, reduced only in class size. We are finding that some children placed in classes for the mentally retarded, educationally retarded, or emotionally disturbed do not readily fit into any category, and that they profit more from a program of remediation of deficits than from group instruction in a class in which they do not belong.

4. The concept of learning disabilities is changing the organization, instruction, materials, and techniques of special education. I expect many children with remediable defects will, in the future, remain in the regular grades and receive itinerant, remedial instruction by a specialist. Itinerant specialists and resource rooms in elementary schools will tend to reduce the enrollment in self-contained, special classes for some groups such as the mentally retarded and the emotionally disturbed.

5. My experience in research on learning disabilities leads me to the conclusion that we should identify these children early and institute remedial measures at ages four and five. We have sufficient evidence to show that better results are obtained when we start at an earlier age than at an older age. We should not wait until the child has failed in school at the age of seven, eight, nine, or ten before we begin to remediate the disability.

6. We have used clichés that special education is not apart from, but a part of, general education. Many handicapped children in self-contained classes have been denied sufficient contact with other children. Learning disability programs that are becoming fairly popular in this country, I'm glad to say, may be our bridge between special education and regular education, especially if we keep children with specific learning problems in the regular grades and give the regular teachers itinerant help.

7. None of these suggestions can really be successful until we are able to train a new kind of special educator, which I currently like to call a Diagnostic Remedial Specialist. What we need is a core of such people who are interdisciplinarily trained and competent in both psycho-educational diagnosis and in remediation. In the past, we have had a team of pediatricians, psychologists, neurologists, and social workers diagnose a child and then turn him over to a teacher without the diagnostic team outlining the remedial program for that teacher. Sometimes it looks as if everybody's business is nobody's business. What we need is a focal agent in the form of a diagnostic remedial specialist who is responsible for the treatment or remediation. This would be parallel to a family physician who diagnoses, obtains diagnosis from others, but who is the responsible agent for treatment. Similarly, in learning disabilities, the assessment by other disciplines can funnel through the Diagnostic Remedial Specialist who does the remediation or instructs and supervises others in remediation and helps the classroom teacher adapt instruction and materials to the disability of the child. Until we have a sufficient number of these Diagnostic Remedial Specialists who can do the job themselves, who can help the classroom teacher, and who can supervise others, the field of learning disabilities will be severely handicapped.

Dr. Cruickshank closed his remarks by stating that it took him three decades to learn and that he has two more decades to go to learn some more. I'd like to state, since I'm much older that Dr. Cruickshank, he being a very young man, that I have had four decades to learn and it's going to take me three more decades to unlearn. Thank you.

Lecture - Dr. Helmer Myklebust

Ladies and gentlemen. Coming last in this sequence this morning reminds me of the psychiatrist who was walking down the corridor and he saw a patient doing this (shifting from side to side). So he walked up to the patient, being very curious, and he said, "Mac, who are you?" The patient says, "I'm a clock." The psychiatrist hesitated and thought for a minute, scratched his head and says, "Okay, Mac, if you're a clock, what time is it?" The patient says, "Two-thirty." The psychiatrist looks at his watch and he says, "How do you like that, I'm slow" (shifting faster from side to side).

I'm reluctant, believe me, to try to add anything this morning to what has been said. I've had assistance with what I want to talk about from many people: colleagues, students, co-workers like these, so please keep in mind, as my colleagues here this morning have mentioned, we don't do anything in this field by ourselves.

Since receiving the invitation to participate in this Institute on training of leadership personnel, I really have given much thought to what I might say, hoping that it would be relevant to the questions raised by an Institute of this type. Sam has made confessions. I have a little one. This is my third field, so I couldn't give it up. After all, it's three strikes and I would be out.

In retrospect, the relevant questions to me initially, working as a teacher and psychologist in State schools and institutions, concerned why some children did not learn to speak. At the time, I was involved with deaf children to a substantial extent and I was confronted, of course, with the obvious circumstance that if one cannot hear, one will not acquire spoken language normally.

In the child study center, which I had the audacity to start, I found that many children could hear and still not develop auditory language This led gradually to a construct of auditory disorders and a need for careful painstaking differential diagnosis of many dimensions of auditory behavior and thereby the need to study auditory learning in relation to mental retardation, mental illness and brain dysfunction, as well as in relation to a hearing loss. My interest in all facets of auditory disorders continues.

My main interest for more than a decade now, has been the relationship between brain and behavior, particularly as these pertain to learning. Because of this complex area of study and investigation, it soon became apparent that many children could hear but not listen, and many could see but not look. Both visual and auditory processes were involved, and in need of study insofar as understanding of disorders of learning were concerned. For me, I think that these questions took on the significance of questions such as, "What are the differences or similarities between peripheral nervous system involvements, such as sensory deprivation in deafness and blindness?" How did these affect learning in comparison with central nervous system involvements, that is, learning dysfunctions. You see, the question that I am suggesting had arisen and continues to be before us. What are the differences here or are there any differences? The question was, "How do these dysfunctions affect all learning--verbal and non-verbal?"

During the past decade I was fortunate in being able to study some of these questions. And during the past summer two major investigations, certainly major for us, were completed. They had been on-going for approximately six years. Inasmuch as these seemed to me to be relevant to what I'm trying to present this morning, I will present some of the outcomes very briefly.

First, on the question of the effect of peripheral involvement--that is, when information such as auditory does not reach the brain--electrocortical processes are altered.

On this occasion, I'll just take another little digression and say I think that we've all been stressing that it takes some time and patience. I think we've been looking at this particular point for some twenty years.

Now, what I'm saying is that when information does not reach the brain, electrocortical processes are altered. I think that's the basic outcome of one of these studies. The brain must establish alternative processes electrocortically in order that learning can be achieved. Also, it is clear, that without auditory bombardment, the brain is quieter. There is less going on in the brain. Hence, and I say this cautiously, presumably, under these circumstances, there is less possibility for learning to transpire. Now we must continue these studies to further explore this in the blind, and in those who are both deaf and blind. Notice how quiet the brain might get under conditions of this kind of severe lack of activation, from this kind of sensory loss. In connection with what I have just said, of course, in the blind it has been established that the alpha rhythm does not appear under usual circumstances. So we have basic changes when certain information does not reach the brain.

In my opinion, what I have just said could be a breakthrough in understanding the significance of sensory impairment. I'm not saying it is. I hope it might be. It's just a presumption. It seems to have a bearing on development of cerebral dominance in the deaf. We're greatly interested in this particular highly unique characteristic of man--this basic hemisphere dominance, and it seems to be less in deaf children. Well, anyway, surely we are approaching an era when we will know something of the psychoneurology of learning in those who are deaf, and both deaf and blind.

Now I took just a moment to say something of the effect of peripheral involvement because I think it helps. I hope, anyway, to put all of what we see in learning disabilities in certain perspective, if you will.

How does this compare with the disorders of learning that derive not from lack of information reaching the brain, but from dysfunction in the brain? Superficially, there are similarities from peripheral to central involvement. However, it is the differences which certainly must be of most consequence. Now my associates from five disciplines and I recently completed what I think we might call an extensive study of the characteristics of public school learning disability children. The principal outcomes from this are as follows.

Education: Learning disability children, as is no surprise to anyone here, were inferior in read and written lanaguage. They were also highly deficient in ability to syllabicate and in ability to spell.

Psychology: Intercorrelation of cognitive functions varied greatly. Intercorrelation varied greatly between learning disability and normal children. For example, coding correlated with other functions for the normal, but correlated essentially with nothing in those who had learning disabilities. Now we can state this in another way. Verbal and non-verbal functions are closely associated in normal children, but not in those with learning disabilities. Secondly, level of intelligence is related to learning for normal, but not necessarily for the learning disability. Thirdly, social maturity--even social maturity is down, is inferior, when a learning disability is present. To summarize the psychological findings, might I state it this way. Learning disability children might have specific faculties at a high level of competence, but they are not able to associate these abilities and of course--put in terms of brain function, they are much less able to transduce one type of information, such as visual, into another type of information, such as auditory.

Ophthalmology: Now, though claims have been made to the contrary, as far as our results are concerned, children with deficits in learning do not show abnormalities of vision when carefully compared statistically with the norm. There was an equal incidence of visual involvements in both populations.

Electroencephalography: The EEG abnormalities were not characteristic of all of the children with learning problems in comparison with those without such problems. EEG dysfunctions did appear for a sub-sample of those with deficits in learning. And the most characteristic abnormality was focal--slow waves. It was of considerable interest that those with non-verbal learning deficits showed more electrocortical disturbances than those with verbal learning deficits. Surely, there are implications here in terms of brain function and learning. I should like to stress that this is in complete agreement with our clinical remediation experience. I so often say to my students, just to try to suggest a way of thinking about it, that if you have to have a learning disability, take the one that is verbal. It's much less debilitating than the one that is non-verbal.

Neurology: The incidence of abnormal signs was much more common in those with learning disabilities. (We could discuss each of these in some length but of course that is not our point here this morning. I'm still trying to reflect on where we are and will get on with that in a minute.) But notice how that in agreement with various other studies, the incidence of what the neurologists finds and calls "abnormal" is more common in those who have learning problems. This was more noticeable as the degree of learning deficit increased. You know, he was down on one or he was down on a number of the functions measured, so of course you could do correlations with one, with two, with three, and so on. Now, as the incidence of learning deficits increased, the neurological signs increased. There was a relationship between degree of involvement of learning and what the neurologist found as degree of involvement. There is a trend for more neurological signs to appear in those with non-verbal deficits than in those with verbal which, as I indicated, was the case with the EEG.

Now a couple of other outcomes as a result of this experience. Throughout this study we used a learning quotient as a definition of normal versus learning disability. This investigation indicated that this approach might be highly advantageous. When you do this, the child is classified as normal or learning disability according to the extent to which he actualizes potential for learning. The learning quotient approach may have significance for the future of learning disability as a field of education. Now, to comment a little more on this, I'm greatly impressed with the work of men like Cattell, Holtz, and Thorndike who pursued questions of the type mentioned by Dr. Frostig and others here--what is potential and what relationship does it have. Now surely if a child has deficit in learning, it must be in terms of some kind of base line. So, in talking about a ratio of actual learning to potential for learning--we haven't resolved this one, of course, in this field nor has any field at this time. I personally think it is one of the greatest challenges before us. I repeat that it might be that a formula of the learning quotient type will be helpful in the future in this connection.

Lastly, a rating scale that was administered by teachers, was used as one of the techniques to explore ways in which learning disability children might be identified. Now our charge, our commission in this Public Health Study was to come up with a way for screening and identifying children with these problems in a manner that wouldn't cost a fortune. You all know how expensive the diagnostic process is. Well, almost as a last resort, we included a rating scale. We asked the teachers to rate all of the children involved in the study--both populations, those with and those without learning problems. And this was almost an afterthought. Now we had voluminous evidence from educational diagnosis, neurological, psychological, and so on, as I have indicated. And of course the study was almost over and we started looking at what the teachers had rated, what they had said in their ratings. To my amazement, out of the some fifty variables that you can use to say this means he has problems in learning, the teachers came out on top in terms of reliability so far as psycho-educational studies were concerned. And then if we take the position that you have to show some organismic malfunctioning, we could take the rating scale and put that against what was found in EEG, neurology, and so on. I must say that it seems, both in terms of reliability and validity, that the rating scale proved highly effective for identification.

Now I have taken a rather long route around here and I want to come to just a final comment. In terms of the future, my reflections would be something like this. The concept of learning disabilities is valid. Hence, there is a psychology and there is a neurology of learning which characterizes this type of handicapped child. In view of this, I think we might say there is a behavioral science for this area of learning. Of course, we insist there is a behavioral science of learning. I think there is a behavioral science of learning disability. It is a field in which investigation, as has been indicated by my co-workers here, will be fruitful for all education.

The question for the future is not who is he? (I'm sensitive about this because we've all served on committees so long trying to say, "This is who he is.") Now what I'm saying is, that's not the question. And without intending any kind of criticism of the future for education and psychology, I would say that the more relevant question for us--and I don't mean just professionals, I mean for Congressman, senators, representatives and many other people, and we're happy to go along with what Sam said about the tremendous developments in this connection--the question is, how long will it take education and psychology to accept this child as one having the kinds of needs that he has. And then provide the specialized programming he needs so that he will be given his due consideration. In other words, how long will it be before we no longer confuse him with various types of deprived or handicapped children and give him his rightful place in the sun.

It's been a great pleasure to be with everyone and I'm grateful to you all for what you have done for me and for us today. Thank you.

APPENDIX B

TEXTS OF SPEECHES

Keynote Address* - Dr. Leonard J. Lucito

The letter inviting me to speak tonight described my assignment. Just as important, it indicated the qualifications which I bring to this task. Here is an excerpt from the letter:

> "... We would like to invite you to be the keynote speaker on Wednesday, December 3. The Pre-planning Advisory Committee developed a philosophy that the institute would be nonrestrictive in ideas regarding issues and the program has been structured so that none of the speeches will be an official pronouncement on issues.
>
> We feel that you would be the best choice for fulfilling this philosophy because you are not as closely related to a learning disability program as the participants..."

It is my understanding that the most commonly accepted definition of an expert is a person who has had no training in a field, who has spent little time in contact with or study of the field, and who is determined not to let the body of knowledge influence his thinking. Under this definition I have more impressive qualifications as an "expert" than any other person in the room.

In preparing for tonight, I wrestled with the question: What type of keynote address might be most useful for the conference? I could have prepared a formal, in-depth presentation on a major issue with the typical profusion of citations from the literature. Not knowing what issues would turn out to be most important to the conference, and keeping in mind the intent of the Pre-planning Advisory Committee (to have the conference be nonrestrictive regarding issues and to have no official pronouncements), it seemed best to present an informal talk ranging across a variety of ideas.

It is hoped the informality of the keynote presentation would contribute to the general tone of the meeting so as to provide an atmosphere in which difficult, and sometimes emotionally laden, issues might be better handled. Since I know most of you personally, I believe we can probably feel comfortable under such circumstances. It also is hoped that by choosing to present a variety of ideas rather than a fully developed single issue paper, the probability of my offering some food for thought will be enhanced as you discuss different topics during the conference.

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*Condensed for publication purposes. Section I has been left mostly intact since it is unlikely these topics will be covered in other parts of this publication. Severe editing--at times complete topics were deleted--was done in Sections II and III for the opposite reason.

This presentation, then, will be divided into three basic sections. The first section will give you some feel for the current conceptualization of the training program of the Bureau of Education for the Handicapped. I assume that the better the Federal program is understood the greater the likelihood you will identify ways in which the Federal program can assist in reaching the objectives formulated during the conference. In the second section, I will throw off my "Fed" role and talk about some of the events I see in education, and the possible implications these have for training personnel in special education. And lastly, I will exercise my formerly mentioned qualifications as an "expert" to indicate my perceptions of the field of learning disabilities.

Section I: Bureau Thinking

General Program Structure

During the first couple of years of the Bureau's existence, the Division of Training Programs conceptualized a general program structure. It was intended that the program structure should allow for a comprehensive, balanced, flexible plan which would maximize the ability of the Federal program to assist the field in its strivings to produce the quality, quantity, and types of personnel necessary to educate handicapped children. The result was the construction of a conceptual model for the Federal program consisting of three major subdivisions--Regular Awards, Special Project Awards, and Implementation Awards.

Regular Awards--The Regular Award component is designed to provide Federal grant funds, and substantive program consultation by the staff of the Division of Training Programs to personnel training programs conducted by institutions of higher education, State educational agencies, and other appropriate nonprofit organizations. Part of the grant funds are intended to supplement the cost of operating the training organization's program, not to assume the total cost of such a program. In addition, part of the funds can be used to financially assist students or others receiving training. A variety of training models which are acceptable to the field at any given point in time can be supported under this component. The levels of training presently can range from the undergraduate through the doctoral. Roughly speaking, this component encompasses the program concepts initiated with the passage of Public Law 85-926 in 1958 and its subsequent elaboration over the years. You are familiar with the Regular Award activities through your participation in the full-time academic year traineeships and fellowships, the special study institutes such as the one you are attending this week, the summer traineeships, and the program development grants. Together, these activities function as opportunities for the Federal program to enter into partnerships with grantees for the purpose of:

1. Preparing educational specialists to make their first entry into the manpower pool of special education;
2. Up-grading those who are presently employed in the education of the handicapped but who have not had the

minimum amount of training necessary to meet certification requirements;

3. Retreading personnel who are switching from related fields such as elementary education or psychology to special education;
4. Supplying advanced degree training for those planning to remain in the same educational role--e.g., a teacher with a B.A. degree in special education working on a M.A. degree to become a better teacher;
5. Offering additional training to personnel planning a change in their educational role--from teacher to supervisor; and
6. Up-dating the knowledge and skills of presently employed qualified personnel.

Special Project Awards--In contrast to Regular Awards, the purpose of Special Project Awards is to provide the field with a Federal mechanism by which it can be assisted in the exploration and evaluation of new models to train personnel. The Special Project Awards are the research and development element of the program through which risk money is invested for improvement in future training models. Under these awards, investigators can receive Federal funds to support the complete process of developing significant major inprovements in training practices. This involves such activities as constructing a conceptual model, designing a prototype of the model, exploring and refining the prototype through pilot activities, and evaluating the prototype. Empirical prototype testing, not testimonial evidence, is a necessary part of all Special Project Awards. In fact, funds are only given to the grantee for prototype testing if a satisfactory evaluation design has been reviewed and approved by the Division of Training Programs prior to the initiation of this phase of the project. As usual, the review is made by outside consultants and the Division staff. This part of the program can, and usually does, assume the major financial cost of projects.

Two of the basic criteria applied to special projects are: (1) Does the project have the potential to solve a major personnel training problem?; and (2) Can the solution offered by the project be generalized to a significant number of training situations to warrant a special project effort?

Special Project Awards are relatively new. The first six projects were funded in the Spring of 1968. Therefore, we have had little experience with this element of the program. Nevertheless, the present projects look very promising. It is believed that the Special Project Awards should be considered successful if within five years, 25 percent of these projects offer workable models for major improvements in training practices. Many of you are aware of this part of the program. As I scan the room tonight, I see at least one person who is conducting a Special Project at this time.

Relationship of Regular Awards to Special Project Awards--The planned relationship between Regular Awards and Special Project Awards is obvious. While the Regular Awards component is producing trained personnel through the best practices we know, the Special Project Awards are developing improved models of training for the future.

When the principal investigator of a Special Project, the professionals in the field, and the Division of Training Programs are confident that the worth of any new model has been adequately demonstrated as workable and as an improvement significant enough to justify the effort of incorporating it into the on-going training programs, the Division of Training Programs will examine the Regular Awards component with an eye to modifying it consistent with the new model. We firmly believe the field and the Division of Training Programs have an important responsibility not to advocate major changes until the model is adequately tested. To do otherwise would be tantamount to encouraging change for change's sake. This would probably be "exciting, interesting, and satisfying" to the trainers, and may even enhance their professional reputations; but it could be irresponsible and unethical behavior with respect to the people in training and to handicapped children.

Implementation Awards--In designing a comprehensive program, it was recognized there may come a time when the on-going training programs might need additional financial assistance in order to retool for the new models produced by the Special Project Awards. This newest ingredient of the Federal program has been labeled Implementation Awards. It is a contingency we have anticipated. No funds have been budgeted or awarded to date; nor have the details been settled of how Implementation Awards will be funded. Nevertheless, one can envision the contribution Implementation Awards might make to the orderly process of transition from the completion of a Special Project to the initiation of the improved practices of training programs.

Interaction effect--The interaction between the Regular, Special Project, and Implementation Awards should add extra strength to each of the parts of the Federal training programs. We believe a balance between the three parts should provide a comprehensive, flexible program. That goal has not been achieved yet. However, illustrating the Division of Training Programs' commitment to achieving a better balance is the growth in Special Project funds. Out of the $24.5 million appropriation for fiscal year 1968, approximately $130,000 was spent for this aspect of the program. From the $29.7 million appropriation of fiscal year 1969, about $1.2 million was invested. With no increase expected in the appropriation for fiscal year 1970, we have budgeted $2.24 million for special projects. In making some tentative projections for 1975, we planned on bringing this amount up to $9 million out of a possible $50 or $60 million. Even though the projections are very speculative, this gives you an indication of the value we place on special projects.

Objectives and Strategies

In addition to constructing a comprehensive conceptual model of the Federal training program, the Division of Training Programs is continually engaged in specifying and discussing specific program objectives in addition to planning and initiating strategies relevant to the objectives. By briefly describing some of these objectives and strategies, I hope to share with you more of the thinking current in the Division.

Collecting, analyzing, and interpreting information for decision making--As you know, the Office of Education, many State educational agencies, and a number of universities are formally adopting some version of a program planning and budgeting system. The effectiveness of these systems depends on the collection of great quantities of reasonably reliable and valid information plus extensive analyses and interpretations of such data in a short period of time. The capacity to analyze and interpret information prior to the time a decision must be made is one of the crucial bottlenecks in using these systems.

Through contracts, grants, and internal efforts the Bureau is in the process of establishing a computer based information storage, retrieval, and analysis system. When operational, it should help to overcome the time problem as well as improve the analyses.

Relating training to research activities of the Bureau--The Bureau of Education for the Handicapped is the only Bureau in the Office of Education with both training and research in the same administrative unit. Tying together the objectives of the training and research divisions is being discussed. One area receiving special attention by both the training and research divisions is the development of instruments or procedures to assess the effectiveness of training programs. As Congress, and in turn the Office of Education, press for systematic evaluations of Federal programs, it becomes increasingly more important for training programs to have methods of assessing their activities.

Sound procedures to link personnel training practices to the performance of children is presently sketchy at best. One need only remember the efficacy studies in mental retardation to see the consequences of the lack of good assessment procedures. Even though professionals in mental retardation insisted that reading and arithmetic were not the primary, or only, areas of curriculum concern, the studies focused on these areas because they were more easy to measure than others. With inadequate assessment of children's growth, it is almost impossible to draw unambiguous inferences about the influence of personnel training on children. In response to the problem, the Division of Research is considering future funding of two research and development centers. One center would attack the problem of developing standardized assessment procedures for handicapped children; the other would devote its energy to the assessment problem related to evaluating the products of personnel training programs. Even after developing adequate measuring tools for both tasks, there still remains the job of linking the two types of procedures in order to reach that state of sophistication whereby statements can be made about the effect of personnel training on the performance of children. My guess is that it will take 10 years before concrete results will be realized.

Developing conceptual and theoretical bases for personnel training programs--Staffs to conduct training programs have been, and still are, in very short supply. With the expansion of research projects, model demonstration service centers, instructional material centers, and other activities, not to mention training programs themselves, the picture will probably get worse rather than better in the near future. The atmosphere created by these pressures seems to be one of act now, think later. The persistance of this atmosphere has contributed to the neglect of construct and theory building in relation to personnel training programs. Other fields have demonstrated the power of theory. We believe a better balance between theory building and action-oriented activities is called for in personnel training for special education, and in turn it will be more beneficial to handicapped children over the long run.

Initiating change to provide a more favorable balance will probably require a new force to enter the situation. The Division of Training Programs thinks it may be of some assistance in this area by providing funds and professional recognition to those who are productive in theory construction activities.

Two Federal strategies have been discussed. One is to fund a center or centers devoted to this task. The other is to fund six to 12 professional chairs in special education at universities around the country. Although the professors holding these chairs would engage in actual training functions, their activities would primarily be for the purpose of having a continuing contact with reality while pursuing the goal of theory building. In accepting the positions they would agree to meet together three to four times a year. The major business of the meetings would be to share ideas by constructively criticizing theoretical papers previously prepared at home by the participants.

Exemplary demonstration personnel training programs--The use of exemplary demonstration centers as a means of increasing the chances of propagating improved educational practices with respect to children is well accepted today. To a large extent the popularity of the approach is due to the recognition that printed documents, films, and so forth, are not capable of communicating all the cognitive and affective information necessary for a person to replicate quality educational practices. Application of the exemplary demonstration strategy to personnel training programs seems to be a logical extension. It would provide opportunities for members of training staffs to observe and even participate in activities they wish to carry back to their own programs. To mount exemplary personnel training centers would require additional funds for the extra staff, space, and materials needed to serve visitors who want to study exemplary practices. The Division of Training Programs has been considering this as a possible objective.

Providing opportunities for trainers to solve common problems and to up-date themselves--Presently there are few occasions for trainers of different organizations to explore intensively and solve persistant common training problems. Special study institutes, of which this is a good example, are usually limited to two or three days. Similarly, the Teacher Education Division meetings of CEC are time restricted. Short meetings are useful for some purposes, but other purposes require sustained working associations. It is the latter which seems to be missing at this time. The Division is discussing the possibility of providing some mechanism to encourage groups of personnel training staffs to organize a series of meetings around a perceived common training problem. The series would continue until apparent solutions had been elaborated beyond the usual collection of vague ideas. Perhaps, the Division need only publicize its willingness to fund special study institutes of that type. This would allow people to meet, get an idea going, discuss it, take it apart, go back home to refine it, meet again to take a second look, and so forth. A by-product of these activities would literally be self-directed training by the discovery method.

A related objective is the up-dating of personnel training staffs. Many of them have been, and continue to be, so busy instructing, researching, and writing grant proposals that they have not had sufficient time to continue up-dating their knowledge and skills. With the rapid changes occurring in education, a person can quickly be reduced to the state of having a nodding acquaintance with new methods of educating children rather than having an in-depth understanding and the skills to demonstrate these new approaches to their students.

One university I recently visited comes to mind as an example of this condition. A demonstration project funded by our research division was in progress on the campus. It was a successful project which was close enough to completion to justify the inclusion of its demonstration methods into the on-going training program. Appropriately, students of the training program had been given opportunities to understand the method and develop the necessary skills by using the project as a practicum experience. They knew the method inside out, and performed well. However, the staff of the on-going training program had only a surface comprehension of the project and probably lacked the skills to teach the new approach by demonstration. The project was to end in several months but no provision had been made to up-date the training staff.

I am not saying these are bad people who were serving self-interests. Each of the activities which consumed their time was worthwhile and needed to be done. They realized their lost opportunity and were frustrated. What I am saying is that the administration of universities, the field, and the individuals involved must make an effort to provide time and opportunities for trainers to up-date themselves.

Assisting in the development of up-dating possibilities is an important objective of the Division. One strategy might be to dedicate a block sum of money to some agency in each of the award areas of the Federal program--i.e., mental retardation, learning disabilities, special education administration, etc. The agency would poll the trainers in the field as to their perceived needs for up-dating and the way they wish to advance their training. Then, the agency would arrange for these activities in a systematic fashion. The activities for up-dating might include visitation and participation in research and exemplary demonstration projects with the promise of extra funds for staff, space, and materials for the places visited. We have funded a special project in the award area of special education administration to develop a model of such an up-dating program and to test its effectiveness. If successful, the model can be generalized to the other award areas.

Another strategy being considered is improving the effectiveness of national professional conventions as vehicles for up-dating. We are discussing a prospective special project proposal with CEC at this time.

Other associations, such as the Association for Children with Learning Disabilities, the American Speech and Hearing Association, and the American Association of Mental Deficiency, can then choose parts of the model for their own purposes.

Possibly applying a voucher system to the up-dating problem could be explored through a special project. Trainers of personnel for special education might be given the responsibility of devising their continuing education program, independently or in concert with colleagues. Each trainer would have a voucher worth around $2,000 for a period of two years. This money would defray the cost of his up-dating up to $2,000 for the two years. Under this approach, the Division would give a grant to some financial organization to process the vouchers as they were redeemed.

Section II: Implications of Educational Events for Personnel Training

Let me now turn to the second portion of the presentation. I have selected some topics which appear to have particular importance to the future of personnel training programs in special education.

Student Involvement

You are well aware of the increasing "demands" some students are making for participation in the reformulation of training programs affecting their lives. These demands vary from reasoned suggestions for improvement to emotional demands for complete student control. The traditional prerogatives of the faculty are being seriously questioned. I believe such conflicts are destined to become more frequent and heated before resolutions are achieved.

The common reaction to student demands of placing a student representative on committees frequently seems to be an overgeneralized and unproductive practice. The arguments in support of this practice usually state or imply that: (1) the student representative can present the committee with the viewpoint of the student group; and/or (2) he has knowledge and experiences across as wide a range of training issues as the faculty allowing him to make contributions as good as or better than faculty members.

To assume there is one generalized persuasive viewpoint held by the student body on most issues is to ignore readily available evidence to the contrary. It has been my continuing experience that on any training issue students will disagree--some hold one position, others hold different views. Therefore, the student representative is in the same situation as the faculty: neither know the range of positions supported by any student group. Relying on either student or faculty impressions to inform committees about student views when more efficient and sophisticated opinion survey techniques are available seems inadvisable.

As with most ideas, student participation in refashioning training programs should not be completely rejected. It appears to me you might well spend some time identifying what productive roles students can play in order to take advantage of the unique perspectives and experiences they do have. At the same time, you should consider in what roles they are unlikely to make positive contributions due to their lack of knowledge and experience. By thinking along these lines, it may be possible to develop fruitful roles for student participation. For example, they can probably assist by sensitizing us to certain rigidities in our thinking which could be barriers to better solutions of training problems. Or they might select from among a number of alternative training approaches the one most attractive to them, assuming all of the approaches are equally likely to reach the desired outcome. This would probably increase the motivation of students. On the other hand, most undergraduate or M.A. level students would be in no position to identify the competencies needed to perform an educational task or evaluate whether the task should be performed at all. The odds are that they would lack the relevant experiential background and acquaintance with the literature. At a later level of training, e.g., doctoral, they would be more likely to have gained the capacity to make significant contributions in these areas of decision making.

Individual Differences

It has been interesting to be a member of a profession which continually espouses the need for being sensitive to individual differences of handicapped children while doing little more than other areas of higher education to provide individualized pre-service and in-service training of personnel who will educate handicapped children. Most often our efforts have been concerned with the rate at which trainees proceed through a prescribed course of study. Exceptionally good students have been allowed: to carry a greater than normal course load; to proficiency a limited number of courses; or to waive certain courses. Modification of the curriculum to suit individual students has been attempted less frequently. When it has been tried, usually students have been formally enrolled in independent study courses or informally assigned special papers and experiences. These practices have made worthwhile contributions; but there are other important dimensions of individualizing training programs which might be suspectable to development.

Individualized styles and general principles of instruction--Undeniably there are basic underlying principles usable by everyone wishing to provide sound instruction to handicapped children. However, we can observe a wide variety of different, yet equally successful, styles across teachers as they execute the same instructional principle. One intepretation might be that the differences in styles are not significantly related to the successful use of a principle. Another interpretation might be that some of these style differences, although important, can never be systematically taught. Consequently, the personnel training programs should concentrate on teaching the principles while placing the burden of developing individual styles of instruction primarily on the prospective educator. A third interpretation might be that it is possible to discover important relationships between the styles of performance which are successful or unsuccessful for a given individual and the physical and personality characteristics of that individual. I subscribe to this last interpretation. It lead me to the conclusion that in addition to including the general principles of instruction as common learnings for all students, we have a responsibility to assist students to develop styles of teaching consistent with their characteristics, and when possible to expand the range of styles they can perform.

Looking at the training of educators as if you were considering the training of actors or entertainers, a number of possibilities come to mind. Ordinarily actors learn how to use make-up, clothes, wigs, ways of walking, and ways of talking consistent with the characterization they wish to portray. Furthermore, within rather broad limits set by their physical and personality capacity they can learn to play a variety of roles requiring different styles. I wonder if such training would assist teachers to develop their own individual styles, become more adaptive to different learning situations, and consequently more effective with children.

Section III: Observations on Learning Disabilities as a Field

At this point I wish to share a few observations on the development of your field as I see it.

In the short history of Learning Disabilities, there have been hostile forces working against the group of professionals interested in developing a field around the concept of learning disorders. A large number of people have used many different lines of attack.

One approach has been to act if it were reasonable and appropriate to expect of this newly developing area of handicap all of the following: a definition of learning disabled children which has no vagueness; agreement among practically all workers as to the "true" definition of such children; identification and diagnostic procedures with little to no ambiguity as to the interpretation of the resultant data from the application of such procedures; and instructional methods and techniques which are used exclusively for learning disabled children and not appropriate for other children. Some people have openly stated such demands; however, most often the expectations I have just described are insinuated by such statements as:

> "What is a learning disability? I can not see clear differences between remedial education and so called learning disabilities. Until the LD experts agree on a single definition, it is hard for anyone to seriously consider learning disabilities a field. Too often it is impossible to obtain a sure diagnosis of learning disability as distinct from such other conditions as emotional disturbance, mental retardation, or poor educational experiences."

You undoubtedly have faced these and many similar statements as a person interested in learning disorders. The important point is that no other area of education, whether regular or special education, can live up to these excessive expectations. For the fun of it, you might try substituting mental retardation or any other category of handicap into the types of statements used to attack the area of Learning Disabilities and see if those longer established areas are also found wanting. If you fall into the trap of overly defending or apologizing for Learning Disabilities against these extreme expectations, it seems to me you simply will be tilting at windmills rather than being productive.

Strong external pressures also have been generated against the establishment of Learning Disabilities as an accepted category of handicap due to two recent trends. At about the time Learning Disabilities began to emerge as a field some special educators began to recommend that all categories in special education be abolished. They contend that little educational utility is realized from categorizing handicapped children; in fact they assert categorizing is distracting from the task of supplying appropriate educational services. At the same time, minority groups and professionals in the field of the culturally disadvantaged have emphasized the negative consequences of labeling children.

Another source of external pressure has been those special educators who identify with already accepted categories of the handicapped. They appear to be concerned that legitimatizing a new category will decrease the amount of funds available for their area of the handicapped.

In spite of these hostile forces, and maybe partly because of the external threats, you have been able to develop Learning Disabilities to the point where it can legitimately claim the status of a professional field in special education. The Oxford Universal Dictionary defines the word "field" as: "an area or sphere of action, operation, or investigation." Anyone examining the rapidly expanding services to learning disabled children in the 50 States of the country must conclude there is considerable action in the sphere of Learning Disabilities. The level of training and research activities can be guaged to some extent by the large number of people present here tonight, all engaged in training and many in research. Learning Disabilities has also been active in State and Federal legislation. The professional quality of the activities certainly is equal to other areas of special education. Therefore, as far as I am concerned, to ask if Learning Disabilities should be a professional field is to ask a question which has already been answered in the affirmative.

I hope you will not spend time in this conference justifying Learning Disabilities as a field, but rather move toward specifying the goals and objectives of training programs. Just as important, you need to describe promising ways of how these objectives might be achieved.

Please accept my best wishes for a successful conference.

Lecture - Dr. Richard Usher: "A Personalized Teacher Education"

I would like to share with you some ideas about improving teacher education. I am not in the field of special education or learning disabilities, but I have been very concerned with teacher education in many ways; examining the research on teacher effectiveness, the personal experiences of my own as an elementary teacher, and the work I have been doing in teacher preparation while at the University of Northern Colorado (formerly Colorado State College) in Greeley. Today, I will wind up what I say by trying to provide a kind of skeletal direction which I would like to see teacher education take, this will include three or four phases that I think are tremendously crucial for us in planning the education of teachers for the future.

To get to that, I will first try to do two kinds of things: One is to talk to you about previous research; mainly research on effectiveness in teaching that deals with the effectiveness of a professional teacher. The other will be to say a bit about a point of view--the kind of framework I use to guide my own thinking.

Research In Teacher Effectiveness

I know that many of you are familiar with research in this area. But, if you look historically at what's been done in this respect, you know that the results of such research--research attempting to demonstrate what is effectiveness and research attempting to distinguish between effective and ineffective professionals--all the results of this type of research have been generally disappointing. Vast surveys have been made year after year; the conclusions generally given from these surveys are very inconclusive. I think one of the reasons why this is so, or has been so, has to do with the inadequate ways we have been looking at the problem.

1. Teaching as synonymous with knowing. We first tried to understand effective teaching mainly as a question of scholarship--this is the idea that anyone who knows can teach it. And there was a good bit of research once upon a time trying to demonstrate that particular idea. Most all of us know that it's not that knowing something isn't important; it's just that knowing something isn't enough--not nearly enough. Teaching, as we have found from research,is not so much a question of scholarship. All of you are familiar with students who say, "Well, he knows it, but he just can't get it across." Probably some of you have had classes and you have said, "My gosh, he was a lousy teacher. But, you know, I learned a lot." Now these kinds of comments lead one to recognize once and for all that scholarship is not necessarily the key to effectiveness in professional work. Knowing is not enough. This is true for another reason. It's true because knowing is not synonymous with behaving and it is certainly not synonymous with being. To me, a professional worker,

and in particular a teacher, is not just someone who knows something; he's someone who is something; someone who is a particular kind of person that has learned to use his own unique "personness" in order to fully engage people in the process of learning. I remember at the University of Florida research was done which found that there were no differences between "good" teachers and "poor" teachers on the basis of their knowing what teaching ought to be like. Good teaching was obviously more than simply a question of not knowing what teaching ought to be like. Obviously, both the "good" and the "poor" ones know what it ought to be like. The only distinction you could make is that apparently only some of them can do it and apparently only some of them are that way. This distinction between knowing, being, and behaving is a very crucial one. I can remember a story I heard once about a farmer--he had been farming for 30 years--and the county agent was a young fellow trying to convince the farmer that he ought to move toward some modern farming techniques. He ought to start terracing his land and rotating crops and this sort of thing. The old farmer listened patiently for a while and finally he interrupted the young fellow and he said, "Well heck, I ain't farmin' now half as well as I know how." And I think that's true, you see. We "ain't" behaving now half as well as we know. All of us know better than we are. We know we shouldn't eat so much, or drink so much or smoke and these kind of things. But the question of teaching is not just a question of scholarship in either direction--either in terms of content or in terms of knowledge about what it ought to be like or the appropriate methods to use.

2. Teacher Traits and Characteristics. One popular direction for previous research has been in examining the traits or characteristics of teachers. "Traits" are seen as surface kinds of characteristics. A sense of humor, enthusiasm, altruism, organization, etc., are illustrative of the kinds of traits that have been examined. Now the main difficulty with the "traits approach" is that the more you look at teachers and their teaching, the more traits you begin to find. So you do a study and you have these teachers that are recognized as effective by their peers and by their students, or they may be recognized as effective according to how well their students can perform. Then we say, "Okay, let's find out what kinds of traits these teachers have." So we look at one teacher and we say, "Enthusiastic. Tough. Has courage. Has compassion."--so on down the line. We look at another teacher, also effective in the same sense as the other one, and we find a different set of traits. We may find this second teacher to be a lenient, permissive, sloppy kind of person. The "traists approach" gets discouraging, too, because the more you look, the more traits you find. I once remember seeing a study that said, "A Thousand and One Things a Good Teacher Should Do", and I started thinking, "How discouraging that is. No one could ever be all those things. No one could ever have all those traits." Not only that, but a trait is a kind of external manifestation of what a person is. Enthusiasm, you see, might be a kind of interesting trait, even a worthwhile trait for a teacher. But how do we help people become enthusiastic? By telling them they ought to be? Or how do we teach a sense of humor? The "traits approach" hasn't gotten us very far. It hasn't helped us much because of some of these reasons.

3. *Teacher Methods and Competencies.* The third approach, and this is by far the most current and the one that has given us some interesting things to think about, is the approach of trying to identify the methods or the competencies of good teachers. I think we have long been rather "locked into" a kind of "methods" point of view about teaching. I personally think that is rather unfortunate. I don't really believe that there's any such thing as a "good" or "poor" method of teaching in and of itself. Methods are nothing but tools in the hands of persons with purposes. If certain methods are useful in helping us to facilitate the purposes at hand,then we may say that those are "good" things for us to do. If they are not, they are not. But methods, in and of themselves, are nothing but tools. We've had a tremendous amount of research done in comparing different methods. We've examined methods that are teacher-centered, student-centered, group discussion, lecture, programmed instruction--you name it. There have been tremendous numbers of studies trying to get at the idea of what is the best set of competencies, the best set of methodologies for teachers to use. We've looked at them very specifically or we've looked in a more general way. Looking at the questions of general methods and procedures has produced research that says, for example, "The good teacher operates democratically." Now you can see all the difficulties with that. What exactly does it mean? Whose definition do we use? This kind of thing. It's so general that it doesn't help us much. Another example, "The good teacher is concerned about structure and is considerate." Again, a kind of vague, broad statement that really doesn't help us very much in thinking about important directions for teacher education. The "methods approach" has been one that has given us many conflicting results. In some cases a certain type of method comes out better than another type according to, let's say, achievement tests' results or reports by the students or judgments by the colleagues. All kinds of criteria have been used. In other cases, the exact opposite kind of method may seem to come out better. The whole question looking for appropriate methods seems like a very straightforward logical approach to finding out about teaching. The logic of it goes like this: If we want to help people learn to be better teachers, let's take a look at the good teachers, see what they do, how they behave, and then teach everybody else to behave in that way. I think that logic breaks down. Even though it seems logical, it really isn't. As a matter of fact, I have no doubt that a good many things expert teachers *do*, and are effective with, they are effective with them precisely *because* they're experts and not because the methods themselves are that important. I remember once at the University of Florida we were given the charge of setting up a "How to Study" course for undergraduates who were having difficulty in their studies. We discussed the problem of, "How shall we set up this course in how to study?" Finally, it was decided that the most logical thing might be, "Let's run a survey of students who are *not* having difficulty in college and see what their study habits are." In other words, "Let's look at the honor students and let's find out what kind of study habits they're operating with. Then it will be a matter of teaching that to the people who are having difficulties." You can probably imagine what you find if you survey students who are making good grades. You find that they go to movies a lot and that they stay up till 3 o'clock in the morning discussing something in somebody's dorm room. Sometimes they don't study at all; sometimes they hit it for 24 hours straight--you find all kinds of very diverse approaches to the whole question of studying. I submit that trying to teach those kinds of study habits to the kids who are already flunking out would be disaster. And this is

precisely the same reason why I think the "methods approach" for teaching teachers begins to break down. What we need is not a telling people what the right methods are or what the good methods are and imploring them to use them, but we need to enlist people in an exploration of the methods that best fit them individually and how they might learn to use them to satisfy their purposes.

Teachers Are Individuals, Too

As you look at all this research in teacher effectiveness the one very outstanding thing that comes across is that teachers, like everybody else, are very unique. They're very different from one another. Even good teachers are very unique from other good teachers. All the talk we've had about taking care of individual differences in students! I think it's high time we thought a good bit about recognizing individual differences among teachers and saying there is no one way to be good, to be effective. The teacher is a unique person who must learn to "use" the uniqueness he is in order to satisfy purposes. And this brings us to a point of view about professional work that is beginning to have some research substantiation. And that point of view I like to call "the self as instrument" idea. It's saying that in professional human relationship areas the most effective "instrument" a person has is himself. The most important thing a teacher has going for him is the unique person that he is. And he must learn to use this uniqueness, this self, to facilitate learning and engage the learners in whatever kinds of purposes are most important: Because, you see, our beliefs "make up" this "instrument" that is us. What we are is a combination of our beliefs, feelings, meanings, values, commitments, perceptions. And the quality of what we believe to be so about ourselves and other people, and our task, seems to come across in spite of what we do or hopefully, partly because of what we do, too. We're beginning to find out that it's much more important what we have built in than it is what we can do or what we may even know. Teaching is a profession that has a tremendous component of spontaneity. So much of what a teacher does at any point in time is an instantaneous reaction, an immediate action in regards to all of the awareness he has at the moment about all the variables that are operating in the situation. An observer might see one teacher do one thing with a child and say, "boy, that was a good thing to do," and then ask that teacher, "Why did you do that?" She probably can't tell you. Because, she did it because at the moment she saw herself this way; and at the moment she saw the child in this way; and at the moment she saw the most important purpose to be this; and because she recognized the rest of the class to be here; there were all of this kinds of reasons right then. What happened, then, was a spontaneous kind of reflection of what she was, how she felt, and what seemed to be most important at the time. This means that the key to "goodness" in professional work lies in the kinds of "messages" the teacher conveys to the kids. These "messages" are conveyed according to the underlying beliefs of the teacher and not necessarily just by her techniques, her competence, or her knowledge. I'm not saying that people don't need to develop competencies and to have tremendous familiarities with all kinds of methods, or, that they need not know anything. What I am saying is that these things aren't the answer to effectiveness. What must become the focus, I think, of any kind of teacher is, as a person, what comes across and it keeps on coming across in spite of what their plan is; in spite of the materials they may be using. What comes across in the instantaneous kind of action and interaction with human beings is so much what we are. What we are! And I think the focus needs to be with this in teacher education. It has to be there. We can't any longer talk about producing people who know the right methods or who know the right information. We must talk about people who are something and who can use what they are to help others learn. The self of the individual teacher and the quality or nature of his personal beliefs of self, others, and the world around me. Not surprising, the "good" teacher is the healthy, fully-functioning, adequate person. What I believe to be so about myself as a teacher, for example, has a tremendous amount to do with how I can "be" in teaching. Believing that I am basically able, basically enough to cope with things that come my way, I'm quite likely to be willing to try things because failure will not be total, it will be regarded as a mistake. Believing, however, that I'm not basically able to cope with most things that come my way; that I'm not quite enough in what I'm doing, I'm likely to approach the task by trying to arrange some external conditions that will require certain action on their part. Believing, however, that other people are always motivated--that there's no such thing as an unmotivated person unless he's dead--I'm quite likely to view the task as trying to capitalize on the kinds of ongoing needs and satisfactions that the kids are already engaged in. Believing that the overriding purpose of education is to help all to learn--and become to the best of their potentialities, I'm likely to approach my task as a teacher with a tremendous concern for everybody I'm working with. Believing, however, that education really should be only for the gifted; only for those who can do more and go further--I'm quite likely to approach it by feeling it's a waste of time to fool with some of the slow ones. These are some example areas of beliefs, that I'm talking about. As a matter of fact, they happen to be some example areas of beliefs that have been showing up in some recent research that we did both at Florida and at the University of Northern Colorado. We are beginning to see some dimensions of beliefs about self, other people, the task of teaching that seem to cut across what people do; that seem to cut across the particular methods they may be commited to; that seem to cut across the particular knowledges and skills they have; and thus, may be beginning to get us to some answers about what's involved in the effectiveness of a professional person.

Behavior Is Always In Context

You cannot judge what I do apart from the whole context and the relationship I have with the person with whom I am interacting. In believing that people are fundamentally able to cope with their own problems, I might, for example, have two people in a classroom. One of them is Jimmy over here and I've known Jimmy for quite a long time and we get along pretty well. And I know that he understands me. I know that he's generally making it all right. He gets into trouble sometimes, but that's just because he's a kid. There's another little girl over here, Ginny, let's call her. Ginny is quite different. Ginny has tremendous emotional problems. She's very sensitive. She cries easily. She's had quite a bit of difficulty at home. Having the same basic belief about those two kids, I might believe that they are fundamentally able; that they can generally cope with life themselves; that they can cope with the things that come their way. Now believing that--let's say both of them haven't done their arithmetic. Okay, in the kind of relationship I have with Jimmy I might say to him, "Hey, Jimmy, what in the world's wrong? Why don't you get on the ball, okay? Let's get this done right now!" Believing the same thing, but knowing and having a different kind of set of expectancies between Ginny and I, I might say to her, "Ginny, I see you're having a bit of trouble. Why don't you come on up and we'll see if we can work on this together." Now, you see, if you had someone observing me and asking what kind of methods is Usher using? What does Usher do in situations like that? One observation would be, "Boy, he's pretty strict and he uses controlling behaviors." The other observation would be, "Boy, Usher's very lenient and permissive and warm. And he uses very permissive kinds of behaviors, very freeing kinds of behaviors." Now I contend that you cannot understand exactly what really is happening between Usher and everyone else that he may be working with just by knowing exactly what he does. You have to understand the kinds of expectancies that I have and the quality of the relationship I am able to establish with people. And this quality of relationship is very dependent upon what I am as a person and what I am may allow many kinds of my operations to be effective.

What Is Most Important?

Have you ever spent time hashing through what you really believe is most important about what you're doing? I don't know that there's any more crucial task for anyone who's going to teach, for anyone who's going to work with people. What really is most important when you get to it? This is so crucial, you see, because what often happens to a young teacher--I know for myself the hard way--is that everything seems important, it means you must deal with everything and anybody who's ever taught with a group of people knows that in trying to deal with everything that comes along you probably don't deal with any of it very well--a tremendously frustrating kind of trap we often find ourselves in. A lot of people have said, you know, that the good teacher is the one who knows what can safely be ignored. I believe that there's a lot to that idea, but you don't know what you can safely ignore until you come to grips with the kind of built-in beliefs and feelings that you have. One example: I was observing, when I was in Florida, in an experimental school that had just opened. It was an elementary school. There were four college professors and three graduate assistants in the group. This was the beginning of the second week of school. The supervisor was showing us around. You know how it is when visitors come, there are all of these people dressed up in suits and ties and they're obviously outsiders and people look at them wondering what they're looking for. We were walking around in the halls, looking and talking. The supervisor with us encountered a little boy out in the hall. He was leaning up against the wall with tears in his eyes. She went over to him, found out his name and asked him what the trouble was. He said something like he was lost and couldn't find his classroom. Now, meantime, there are seven of us outsiders, standing around there watching. The supervisor took the little boy by the hand and said something like, "Come on, I'll help you find your teacher." We found out later that the little boy didn't recognize his teacher, you know. She was a person who Friday had had long blond hair piled way up on top of her head and Monday she had long blond hair hanging down. And he just didn't recognize her at that stage of the game! But here's what happened before we knew all that: The supervisor takes him and she knows he looks like a first grader and we all go down the hall together. She then goes to the first grade classroom and opens the door with Jimmy holding on to her hand and we seven outsiders peering in from behind. You've got to get the picture of what that's like to this teacher who's only been in the school for about three days. There she was, a very young and a very pretty teacher standing there in front of her class. She looked over and there all of us were, including little Jimmy. This young teacher, without hesitation, said, "Jimmy, my goodness, where have you been? We missed you so much." She gave him a little pat on his rump and he went back to his seat. We stayed around in the room a little bit and when we went out in the hall, the supervisor said some thoughtful things and I have remembered them a long time. She said, "you know, I think we have a good teacher there." She said, "I started thinking, 'what if that teacher had felt that the most important thing was the supervisor?' She would have, probably looked over and said, 'Oh, Miss Smith, it's so nice to see you and you have guests! Why don't you come in and let me show you the nice bulletin boards our kids have made.' Meantime, Jimmy would have still been around, and confused, and lost. "Or, 'the supervisor said, "what if that teacher had felt that the most important thing was strict discipline? She would have said, 'Now, Jimmy, you're already 26 minutes late. Now go back to your seat and we'll find a way to make up this work later on!'" But, no, the supervisor said that the teacher apparently felt that what was most important was how the little boy felt about being lost: That little boys were most important! And the teacher's behavior spontaneously flowed from that kind of internal decision about what is important. It was a spontaneous kind of inner action that took place because of what the teacher had made as an internal decision about her purposes.

A Psychological Frame of Reference

One other thing I want to identify is the theoretical point of view that I'm operating from. It's probably already obvious, but I want to state it more formally. I believe that human behavior must be seen as a result of how things "seem" to the person who's behaving. Another way to say this very simply is to say that we behave according to what we believe to be so about ourselves, other people and the world around us. Behavior is a function of the kind of personal meanings and beliefs we have at any moment of action: The meanings we have about ourselves in particular, about other people, about purposes, about what's important, and so forth. This is a theoretical assumption, a basic statement of assumption about what it is that influences human behavior. And I'm saying that I think behavior must best be regarded as a function of how things seem at the moment to the person who is acting. This position often seems so common sense, and so simple that it's often overlooked. People say, "yeah, what else is new?" It's not particularly new, but I think it is the most penetrating and valuable notion we have to account for behavior. If you really accept this notion, it means that it is not the events, the facts, the phenomena in themselves that determine the way I act; it's the way those events seem to me. It's not necessarily the facts themselves that determine the way I am; it's how the facts seem to me. It's not exactly what has taken place that determines what I am; it's what I believe to have taken place. If you have a child in your classroom and he believes you're unfair, that's the way he acts toward you. He acts toward you as if you're unfair. Now the typical response is, "Oh, but that's not true. I haven't been unfair. He's wrong." Now the question is not who's right or wrong. The question is what's affecting the way he acts? And when you ask that question, he's like that because he believes you're unfair. And in order to relate to him, in order to understand him and in order to engage him in areas of change, you must start with the way things seem to him--not necessarily the way things seem to anyone else. That's where he is and he can only change, (which is what learning is all about) by starting where he is. The way he acts is dependent upon which way he believes. To change, to learn, to be different means that there is change in how I see myself or how I see other people or how school seems to me or how this idea seems to fit into that one. This means that learning is very much a personal matter. And this is also another reason why the kinds of directions I will suggest for teacher education put the person and his personal world at the center of the program. I think this basic assumption that behavior is the result of how things seem to the behaver also means that to communicate, to understand, to become sensitive to other people, etc., is basically a question of beginning to understand how it must seem to that other person. As a matter of fact, I'm fairly much convinced that the greatest single cause of breakdown in human interaction and human communication is the failure of one person to see how it must be to the other person. Let me give you an example of what happens when this failure occurs. This is one of my favorite stories. I once did a student teaching stint in junior high school and I was given a duty of patrolling the halls. Now I thought it was rather a ridiculous duty, but as a student teacher I didn't have that much say so at the time. They had this system in the junior high school where they had two bells. There was a first bell and everybody was supposed to go in for class and then they had this tardy bell. If you weren't in the classroom before the tardy bell sounded, then you were supposed to be sent to the office. In the office the secretary or the principal or someone gave you an excuse slip signed by the principal. If you got a white slip, it meant your excuse was good and the teacher should acknowledge it as a legitimate one. And if you got a blue one, it meant that you didn't have much of an excuse and that the teacher should take appropriate action to somehow make you sorry, I suppose, that you were late. Thus, the color of the slip indicated what the teacher should do. And everybody who was out in the hall after this tardy bell had rung had to be sent to the office to get one of these slips, whichever kind they could finagle. I was given the duty to patrol the halls and if I saw any students out there after the two bells had rung I was supposed to check them out. I'm in the hall one day and Suzy, about an eighth grade girl, comes walking down the hall. The bell had already rung so I had to go over and check. Now there were some things that had happened to Suzy that I didn't know about at that time. They had happened to Suzy just the day before and they turned out to be very important. That day there had been a meeting called for all the girls--all the girls in the whole junior high--seventh, eighth, ninth grades. And this meeting was one of those, "No Boys Allowed," highly confidential meetings called by the girls' personal hygiene instructor. In this meeting they had gone into the gym and closed the doors and the instructor had spoken to all the girls in somewhat this vein, "Now girls, it's springtime outside and the sunlight is very bright and there's a lot of glass in our building and the sunlight comes in and when you wear these thinner cotton skirts and dresses, if you don't wear slips under your clothes, you can see right through them! It's very embarrassing for young girls to be seen in the sunlight where you can see through their dresses. So, the ladylike thing to do is to wear slips to school and be sure to tell your mothers to make sure you don't forget to begin wearing slips to school underneath all the clothing you have." You can imagine what a big thing for junior high girls this was. It was a very powerful kind of meeting in their eyes. "We're going to talk about the importance of wearing slips to school!" And all this had happened the day before. Meantime, next day, I'm out in the hall supposed to check on people who were out there. I know nothing about this other stuff. So the bell sounded and Suzy's over there and I go over and I say, "Suzy, the bell's rung." "Yes, I know, Mr. Usher." I said, "Do you have a slip?" And she looked at me with this weird look on her face and she said, "Why yes, Mr. Usher!" And I said, "Well, let me see it." Then there was one of those times, you know, when you stand there and you look at one another and you think, "What in the world are we talking about?" And I don't know if anything ever dawned on me. I was kind of puzzled and embarrassed and finally just walked away and forgot the whole thing.

The real reason why I tell this story is that it illustrates in a pretty graphic and funny way what really does happen when two people fail to understand how it must be to one another. In other words, Suzy was behaving perfectly logically and reasonably in terms of the way things looked to her. So was I. But there was no communication. We said words to one another, but there were no shared meanings. And this so often happens in ways that are not nearly so funny. What sensitivity really means is an ability to see how it must be to the other person. It is not necessarily some highly mystical phenomenon. It involves a kind of basic intention on the part of one person to get at how the other must be looking at his world. All of us do this in everyday relationships; the task of the professional is to learn to develop this sensitivity with increased precision and dependability.

Those are some kind of preliminary ideas that lay the groundwork for what I'm now going to briefly present as a model for teacher education program.

Teacher Education For The Future: Three Phases

We will be shifting now from a "competencies approach." A teacher is not a person like a machine who utilizes a very specific procedure for a specific situation necessarily. Rather, a teacher is a unique, creative being that uses the "self" and all the resources at hand to accomplish the kinds of purposes that are determined. The most outstanding thing they have is a "self." If teaching is a relationship, if really what we're talking about is a creation of a kind of livable, workable, productive relationship between people, then there can be no relationship with a nonentity. Teachers can't be nonentities. They must be something. That means, to me, that we should put them at the very center of teacher education. I'd like to propose that we develop a three-phased approach to teacher education. As I present the basic phases you will recognize that there are other kinds of labels we could give them, but I would see these three areas operating in a simultaneous way from the time a person would begin in a teacher education program till the time when he's ready to graduate. So these will not be sequential steps. They're not step by step. They're simultaneous; three kinds of "flows" of experiences that are happening to people throughout their "program." One of the phases of experiences that would happen to a person going through teacher education would be being exposed to ideas, information, techniques, skills, methods, understandings. This I would call the "Exposure" phase. This is the phase in education that we have generally done pretty well with for many years now. We are finding better and better ways to do it using audiovisual techniques and this kind of thing. Another, second phase, would be continuous involvement in the field. This would be called the "Involvement" phase. Notice, I'm saying some involvement in the field starting at the very beginning and going all the way through the program. This is in lieu of the traditional student teaching idea which says that you go through two or three years of learning how to teach and then the last semester you put it into practice. That is a very fallacious kind of notion because the program will be shifting, you see, from this "competencies" idea. A continuous field involvement will be developed as the second phase. And, the third phase would be what I would call the "exploration and discovery of personal meaning", a personal exploration phase which would become the core of the entire program. This phase would involve everybody from the very beginning all the way through in a very enduring and personalized group experience. This group would be a kind of "home base" for each student--a small seminar oriented around him and the kinds of issues he needs to explore and hash through.

1. Exploration: Homebase group experience. So let me start with the exploration phase and talk about it for just a few minutes. This, to me, would be a kind of homebase proposal: We would assign each student to a seminar group as they began the program. This seminar homebase would have one resource faculty person, a sort of leader-advisor-facilitator for the group. Ideally, I would say the group size would be from 9 to 15 students. It could certainly operate with many more than that--at least up to 20 to 25 people. This group would not be like something you have in one semester. It would be a permanent part of the students' entire involvement in teaching or teacher education. I would see it meeting about once a week for a couple of hours each week. This entire seminar experience would provide students with a stable, small group situation mainly oriented toward the continuous exploration of ideas: Ideas about what self is like; ideas about what other people are like; ideas about what in the world does it all mean?; the possibilities are endless. If it's true, you see, that human behavior is a function of belief, then the exploration of beliefs becomes the core kind of operation that the group will engage itself in. There would be continuous student-advisor planning taking place in the seminar group. There would be all kinds of questions like, "What do I need to know? Where do I need to go from here? How can I get it?" The faculty person there would also be the advisor for each of the people in this seminar homebase. It would be one of these rare situations where a student could actually know his advisor!

Ideally, I'd like a permanent room facility to be available for each group whereby each person in it would have a storage place in it for all their materials. The facility could also have chairs in it--old, dilapidated, but very comfortable things. I think this would be, as I say, homebase. The real place where I would bring back everything that I had been getting in all these other phases. In the seminar, I would really hash through it, kick it around, subject it to all kinds of indignities, argue about it, talk about it, see what it means to me--this kind of thing would be the basic function of the seminar.

2. Exposure Phase: Information and Experiences. Running simultaneously with this seminar would be a second phase concentrated upon the exposure of ideas to students. In this respect, I think we need to go much further than just having a number of classes for people to take. Some of this exposure to ideas and information could certainly come through classes and persons would take certain courses as they went through the program. Some of the exposure experiences might come from a series of lectures and demonstrations that could be coordinated by a student-faculty planning committee. Some of these lectures and demonstrations might be required for everyone. Some of them might be just for special interest groups. Some of them might be available for whomever might want to come. Every couple of weeks a calendar of possible events could be set up and published for all to use as a planning guide. If you had, let's say, five of these homebase seminars in operation, you could get one student from each of them plus the advisors to form this "calendar" plan every other week. For example, you might have some special three-day workshops, several longer workshops, plus lecture demonstrations, field trips, exhibits, and book reviews. All of this would be a part of the exposure to information phase that I'm talking about and there would be some of the more traditional kinds of courses going on at the same time. The planning committee from each seminar could meet with the faculty; a calendar could be set up; it could be published; it could be based on what people really need at this point in their program.

3. Involvement Phase: Field Experiences. Now, the third phase that I have mentioned is a continuous kind of in-the-field involvement. I think we've been long laboring with the conception that you learn how to teach and one of these days you start doing it at the end of the program. I think it's taken us a long time to realize that this idea just isn't so. It isn't. The best time to be involved in the field of teaching is at the same time as when you're involved in hearing about ideas, skills, competencies and methods. These things have to start and run simultaneously. Students might start, for example, with a series of observations for a while and then they may move to a kind of teacher-helper position where they are just "around" and talk to a few kids occasionally. Then they could gradually evolve into assuming some responsibility for some of the students, for some of their education for some period of time. They would ultimately assume all the responsibility for the things that are going on in this classroom for a long period of time. So, this would be a gradual kind of increased involvement in the field from beginning to end. Not only that, but I think there needs a professional teacher; for example, involvement in some of the professional organizations, research, and planning meetings. Students who are going to be teaching need to get with people in a setting like these and rub shoulders with "real" teachers and see them in the bar and hear what they talk about and see what they're engaged in outside the classroom. Also, involvement in research--students can become involved in what it's like to do real research. They can see what it's like to try to feed this type of information into a computer. They can work as a research consultant for the school psychologist or for somebody else who is carrying out a project. They can become involved in that way with this facet of education.

To Summarize: I see these three phases as representing a kind of a core which I think teacher education must move toward: Number one, a homebase, a teacher exploration opportunity; number two, the phase of exposing people to all the information, all the skills that we can; and thirdly, a phase of continuous involvement, somehow in the field, with people and particularly with teachers. These run simultaneously throughout the program.

I think here we're putting the person as the focus of the program. We are recognizing that what's going to affect how a person can be as a teacher are the kinds of beliefs, attitudes, values that he begins to develop about himself and other people in the world around him. That's why the exploration phase is at the core because that's exactly what it is dealing with. It's dealing with what do you believe, what does it mean, what does this idea mean to me, how could it ever work, or I just can't agree with--that kind of thing. Most of us have been taught to avoid that kind of exploration. We have been taught not to explore ideas--for various reasons. We have been taught, "Don't tell me what you believe. Tell me what the book says. Don't tell me what your hunch is, tell me what Smith and Jones in 1962 found." Now I don't want to say that what Smith and Jones found or what the books say is unimportant. What I do submit is that what you believe to be true is what goes right ahead affecting what you are. And if you say, "Don't tell me what you believe, tell me what the book says," fine. He can tell you what the book says, but what he believes goes right ahead determining what he's able to be. So, we can't hide ourselves from this phenomenon. We can't hide from the fact that people behave in terms of that they believe to be true and if we want to help them change--shift--become more open and more effective--we have to deal with what they believe to be true.

I remember in Florida that I was assigned to teach in a seminar class. This was known as a discussion seminar and the enrollment was restricted to fifteen students. During registration time students were signing up for the course and a couple of guys came up to me and said, "Usher, is this going to be a wide open kind of discussion class?" And I said, "Yes, it is." They said, "Good. We had one of these kinds of classes last semester and we really learned how to discuss--how to operate in a class of this type!" In short, the vision I had for the class was that we could explore meanings. We could explore information as related to what it means to people and to what people believe about it. And I was going to try to create that opportunity. And I was happy to know that they had had experience in groups and felt as though they could handle this because it's always difficult to get people involved in discussion. It always takes time for them to really feel like they can say what they mean. So I was saying to myself, "Maybe this will go well more quickly." I went in the first day and I made some introductory comments like, "This is the kind of thing I hope we can do in here and these are what some of my purposes are. Now where would you like to go from here? And what kinds of things would you like for us to get into right now?" And when I said that, everybody there rather immediately tried to talk! They raised their hands instantly. Now that tells you something; that they even felt like raising their hands. But, not only that--it's tremendously uncommon for a group of people who have never met before in a discussion to all start out wanting to talk. It just doesn't happen. I was amazed. Then I started saying, "Go ahead." And then they started talking. And when they started talking, they started talking in a very funny kind of language. They would say, "In 1962 Professor So and So found..." and nobody was particularly interested in it--it was a fact perhaps, but who cared? And then they would say, "Orvilles and Johnson indicate, according to this research..." In other words, they started talking about things that were very "arms length." They didn't have any meaning to them or to me. They were just spouting off a lot of fairly unrelated facts that were not related to much of anything. When the break came I was very curious to find out what kind of group discussion class these people had had before? So I asked one of these guys, "Gee, what happened in that class you had last quarter?" He said, "Well, we were discussing, and about midway through the term the professor came in and said, 'Now class, I want you to know that three-fourths of your grade for this class is determined by how much you participate in discussion.'" That's one thing that happened. And, of course, that's what everybody learned--start participating! The other thing that happened was that when they started this, the student might say, "You know, I remember this study and you know, I kind of believe that this might have been the case." And the professor would say, "Now class, there's what Mr. Masters believes." Then he would systematically, belief-by-belief, cut it down and subject it to vicious ridicule. Now what this group of people had learned, you see, it what far too many people have learned in education; and that is to participate like crazy about nothing of importance because that's the safe way.

It is my hope that the proposal I've briefly outlined here will help us to increasingly find ways to engage students in the things that are really important to them. Our future needs sensitive, competent and dedicated professionals in all facets of teaching. We in teacher education must help them to develop their own uniqueness and to learn to use "themselves" as instruments according to what's really most important. We cannot long afford to do anything less. It is up to you from this point.

Lecture - Professor Martin S. Dworkin

Introduction - Dr. Corrine Kass

May we begin our general session for today. Yesterday morning we began our work with an outside speaker. By that, I mean a man who comes from outside of special education, Dr. Richard Usher, who spoke on teacher education. This afternoon we have the good fortune to have with us Professor Martin S. Dworkin, a Lecturer in philosophy and Research Associate of the Institute of Philosophy and Politics of Education at Teachers College, Columbia University; a professional writer, photographer, and film critic. He is also General Editor of the series, Studies in Culture and Communication published by Teachers College Press.

I have asked Professor Dworkin to meet with us today because I feel that in learning disabilities it's important for us to look at some of the philosophical issues involved in changing children's behavior, in changing sensory modalities.

I heard Professor Dworkin speak in Rochester, New York, at a conference on "Visual Literacy." This was a conference sponsored by Kodak Company--interestingly--so you can see why the visual part of the literacy--and was most impressed with his insights.

Professor Martin S. Dworkin

I have to confess to several things. I feel a tremendous amount of frustration in standing here. I mean this honestly. I feel like Satan in a den of angels. I protested to Professor Kass that I really had no time to give adequate attention to the material she wanted me to deal with in learning disabilities and was only able to really work in it a few days. Much of that time was spent in the most abject puzzlement over the amorphous reality and non-reality of what it was you people are after.

Coming here and sitting for about forty-five minutes or close to an hour in one of your sessions I had many of my feelings corroborated. I mean this not invidiously. I feel that there is something not only real here and vital, but something essential in the consideration of all education--of the entire process of teaching and learning. And one of the things that bothers me is something I feel is so essential. I'm worried about the massive juggernaut of special education that is underway here, which will create departments, subdivisions of departments, with budgets, emoluments, rewards, power--all of the other things that go along with such things. And then this would become permanently established curriculum in the society and no real attention will be paid until much too late to just what the terms may mean.

These questions, by the way, were raised and raised very seriously and often quite profoundly in many of the pieces of literature that Professor Kass sent to me: reports of symposia and meetings that were held in formulating the field. This is something that occurs again and again in the history of education, as you well know, when subjects of study, subjects of concern to professionals, are marked out and are established with credentials that are either good or bad.

I wonder. It's a philosopher's job to wonder. But if it is presumptous of me to stand here and talk to such a group, I must say that it may be for many reasons. A primary reason is that if the ministrations of a philosopher are felt to be required in your deliberations at this point, I'm a very curious choice. I'm not really a typical philosopher at all. Typical academic philosophers could be very loud in stating that I don't really fill the bill of what they call a philosopher. I myself don't feel that I could represent philosophy at all in the sense of perhaps having a philosopher come in on a chain, you know, he's attached somewhere, and there is a music box grinding away in the distance and he dances his little philosophical tune and you have heard the specialist from that field, you see. I don't think that way. I don't think thinking should go on that way.

In many ways, for example, I think universities and their framework can become most anti-educational in formularizing what may be no more than specialities as being real areas of knowledge. Look in any college catalog and ask whether the courses there represent real areas of learning--proper divisions or subjects of study. These are questions that have been asked since universities came to being, of course.

Well, however, I think I can claim a certain concern with the problems and dilemmas in teaching and learning. In fact, I must tell you something that I'm certain must have occurred to so many of you. My first inclination, when I was confronted with the invitation and with the subject of learning disabilities, was to say that I don't know anything about learning disabilities, but I can talk about teaching disabilities. I think I often feel, as many teachers--if not all teachers do, I often feel that I know a very great deal about teaching disabilities.

And at this point, sort of to get things going--as a tactic to make our pedagogical principles visible--I would like to read a letter of a certain historical importance that may explain something of what I am trying to do here--a little mischievously--but nonetheless, in a very real sense. This is a very important letter written...well, I'll just read it and then give you the citation.

"Dear Sir:

> Notwithstanding the discouraging account I have received from Colonel Reed of what might be expected from the operations below, I am determined, as the night is favorable, to cross the river and make the attack on Trenton in the morning. If you can do nothing real, at least create as great a diversion as possible."

The dateline is McKonkey's Ferry, 25th of December, 1776, and it is signed, "I am, Sir, your most obedient servant, George Washington." Of course, this is the letter to Colonel Cadwallader, the original of which is at the historical society in Pennsylvania. It's a delightful thing. And I, too, will attempt to create as great a diversion as possible!

You've surely encountered this tactic on the part of students so often--anyone who has been teaching for years, particularly in undergraduate courses. There may be only different styles in graduate courses. They all behave as Marshal Foch did at the first Marne. You remember him saying, in effect: "My front is crumbling, my right is enfiladed, my left is in the air. I attack."

Now, in saying that a philosopher might play some useful role in this Institute, I wonder whether there was some implication that there hasn't been any philosophizing going on. I must protest most loudly. I must tell you that the specialists in learning disabilities do not get off so easily. There has been an awful lot of philosophizing going on, here and surely in all the material that I have been reading, that was sent to me by Dr. Kass. But even extending back into the history of the concept, back into the days when people were talking about things like mental retardation--and I understand some still do--there was certainly a philosophical concern, as in application of method in argument over terminology. What do the terms mean? What do we want them to mean? What do they describe? Do they describe anything real? Etcetera, etcetera, and thereafter relating these problems of definition to fundamental considerations of the purposes of education. Any thinking that goes along these lines, I must say to you, is philosophizing; although all of us, being Americans, resist being called philosophers, of course. Philosophizing is supposed to be a wasteful practice; doing is what we think we do best--thinking that in doing, we're not thinking--which sometimes is all too true.

This again reminds me of a literary allusion. You'll recall the wonderful, pleasantly astonished discovery of Molière's "Le Bourgeois Gentilhomme" that day he was told and began to realize that he had actually been speaking prose all his life. I tell you that you are philosophizing You are philosophizing. (You are not simply doing, without theorizing and analyzing). And, therefore, trying not to be too pedantic at this moment, certain criteria of clarity and of reference to meaning hold for these discussions as well as for any other.

To move ahead, there are problems of definition which pervade the literature so far, which run through the discussions I've heard so far, even when talk was going on about the most specific tactics in classrooms or with individuals, in dealing with pupils or with people who are going to deal with pupils. All these problems of definition signify very basic dilemmas of concern and practice. And while these were not explicitly stated in the particular questions that Dr. Kass suggested for my consideration, I think they are implied and in my ear are certainly loudly persistent, as I'll try to discuss while raising questions on my own behalf along the way.

Now, at this point, it might be valuable to read to you the portion of Dr. Kass's letter in which she suggested certain problems that would be of interest and value to discuss here. And she says by way of preface:

> "My interest in your speech in Rochester centered around the questions you asked regarding what heightening of visual sensibilities does to the human individual's responsibility for the use of such visual information. Relating this to learning disabilities involves these questions:
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> 1) When specialists engage in the task of correcting or ameliorating deficits, what moral issues are relevant? In counteracting the 'bad habits' which children acquire because of their deficits, drastic remedial procedures are necessary.
>
> 2) What are the effects of sensory training on children's later learning styles? For example, it is common knowledge that a human individual tends to prefer some sensory channels over others when communicating. For most persons this seems to be acquired naturally rather than through deliberate training."

I find that I will be responding primarily to the first question, which I think includes many of the others, although some of you may think that I am not responding at all. And here, I must say to begin with, that this question raises--reopens again--the whole question of learning disabilities, learning deficits, although, perhaps in ways that are not ordinarily considered.

I would like to propose here one of the main lines of approach that I am taking: proceeding from an observation that the controversies and difficulties over the meanings of learning disabilities exhibit certain fundamental tensions. First, looking at a wide field with a wide angle lens--say--a fundamental tension exists between professional and political definitions of learning disabilities. By "professional," is intended here the meaning of answering to a public, a notion of the ethical responsibility to standards beyond politics, standards higher than the mere approval of one's contempories: the standards of truth, of hygeia, of therapeia, etcetera. By "political," I mean here responsibility to the sources of power and rewards in this society. There is, in the larger view, a tension in the controversies over definition between professional and political definitions in these senses.

In a narrower focus, using a closer lens, (so to speak), there is a tension within professionals' struggles and controversies over the definitions of learning disabilities--along the lines that I have already suggested--as to whether this is really a separate area needing separated professionals. Now, I am certain, as you are surely certain in your practice, that there are particular cases of children with certain defects that need special teachers and techniques. But these problems, for me, are particular occasions of the general educational problems. For me, all pupils are individuals. When seen this way it is very difficult, if not meaningless, to talk about "normal," "norms" or "deficits." It becomes the more difficult, the more we recognize each pupil as unique. It certainly becomes difficult to so generalize that one can categorize groups of pupils to whom identical tactics can be applied. There is a sense here that we may be training practitioners who will only learn better and better ways of not treating pupils as individuals. I know this is not what you intend--I heard enough to realize that--but there is the danger. In the discussion I was listening to this afternoon, there was a tremendous concern as to what a training curriculum for practitioners in this field would mean--not to really dedicated, really competent teachers--but to those less so; in other words, the majority. I believe--to say it right out--I believe all teachers need to be versed in the concept and practices of learning disabilities specialization. Maybe this does call for departments of "Special Education" in teachers colleges, with specialists in learning disabilities. But I don't know how far this specialization ought to go before we inevitably start conpartmentalizing, not simply the population as a whole, but compartmentalizing characteristics within individuals. And this can happen.

Once again there are so many rewards for discovering a new field and for persuasively making it necessary to the public. This is the principle upon which our whole commercial society is based. You advertise in order to create needs; needs that are considered essential till people simply can't move without cans, boxes, bottles, sprays and other paraphernalia. In academic circles, it is possible to create such desperate needs and to such a degree as to make a whole country neurotic if people don't get what specialists say is vitally necessary. And then you can't educate people out of it. It takes a long time before people say, we'll no longer think that one is somehow crippled by not being able to read fluently in Latin or in Greek. And I'm a great admirer of education in reading in Latin and in Greek. But one is not a moron because one cannot read in these two languages. This recalls an earlier educational controversy, not too long ago, in which the denotation of "moron" was a very mild one, for such a person.

Now this tension that I am pointing to, between the professional and political definition of "learning disabilities," in a way recapitulates the beginning of educational philosophy itself, as I know I needn't remind you in any great detail--as well as the persistence of fundamental issues in the history of educational thought. It also makes it necessary--at least I feel the urge at this point--to bring out into the open certain basic questions which you have all confronted many, many times over. The issues of morality must be exposed here. And in order to raise these issues most clearly one ought to go the farthest extreme, more or less trying to apply a form of the method of "reduction ad absurdum": if one can prove the conditions of the extreme or opposite case not to be possible, you see, one has proven the case.

First, the really hard, agonizing question, about which all professional educators, whether specialists in deficits, retardation and so forth, or not, have always had to worry. Always--since the first teachers--they have had to think about it at one time or another. In every class, in every group of pupils, there are individuals who raise the problem, let us admit, in its most selfish aspect, as to the expenditure of one's own time. Are those deficient in learning abilities or potential worth educating? Are they worth educating at all, if we consider the extreme cases, or those to whatever degree of definition is being held desirable or acceptable in the formulation of the profession? Think of how we must ask this. Think of all the mobilization of resources, the special effort, the zealous care that this enterprise requires. The machinery of an entire civilization has thumped and rolled and ground to create a specialist in learning disabilities, and here he or she is working with one single individual--in a world in which the priorities for effort and care are insane, in which there is a mad waste of the human spirit, for which the best metaphor I can think of is the Biblical one of "onanism," of the spilling of one's seed on the ground. That is what humans are doing to humanity in so many ways: spirit and effort being poured away. I'm trying to state it as strongly as I can. One must think of it this way. We must ask and answer satisfactorily the question of the validity of priorities in a world or epoch, as I say, characterized by the grossest imbalances in ideas of the worth of the human or of life itself; a world in which healers do such good work that more may be slaughtered; in which the very air and the land and the sea are poisoned and exhausted to ends of the utmost frivolity and waste. Every day in my two mailboxes, one of which is enormous, I get what appears to be a whole Canadian forest, most of it junk mail telling me breathlessly about trash that's being offered to me. For this, trees that lived hundreds and hundreds of years were cut down. I'm not getting simply sentimental here, but talking about life, about our future in our world that's being poisoned--wasted. It is in this corrupted atmosphere that we have to ask the question of how much effort is to be expended for the benefit of one individual.

And, continuing to take the question to its extreme and also to bring it into historical focus, I may relate that not so coincidently, but fortuitously, this very last Wednesday night, after my evening class, one of my students came to discuss her term paper which she wants to write on Socrates. (This is for a graduate course in Aesthetics in Education and the student happens to be a doctoral candidate in Special Education). She had heard that I was coming to this conference and came to my office wanting to talk a bit about her work, and I'm very glad she did because this particular teacher is quite a veteran and knows what learning disabilities are all about. For example, she said she know particular pupils with certain deficits who are different from those conventionally described as "mentally retarded" or otherwise deficient, for whom quite special,non-conventional techniques are required. So you see she knew the concerns in focus here. But we were talking about Socrates and especially as Socrates appears in Republic, the first systematic study of educational theory and still, without question, the greatest--and I speak as no Platonist. The student was deeply troubled because Socrates argues for the exposure of infants who are deficient or abnormal. If I may read just a few sentences from the Cornford edition, page 100. This is from Book Three, at 410 for those of you who want to find the passage in other editions. Socrates is speaking very matter-of-factly, very much in line with what was common practice in Greece at that time. He says:

> "...Then you will establish in your state physicians and judges such as we have described. They will look after those citizens whose bodies and souls are constitutionally sound. The physically unsound they will leave to die." (That is, let nature take its course; it is really sinful to kill in such instance). "And they will actually put to death those who are incurably corrupt in mind." (For one thing, you see, these would not naturally die easily).
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> (Parentheses mine).

This notion, of course, is not new. It is characteristically Greek, but also characteristic of all peoples at one stage or another, as you well know. It implies a certain notion of health, a certain normalcy according to nature as common experience can know nature. To repeat: as *common experience* can know nature. Not specialized training, not nice distinctions, but common experience; the ordinary man, in this ancient society, remember, in which life was still very precarious--as it is today, by the way, but we usually don't look at it that way. Today we talk in terms of horribly false fictions such as "life expectancy." We say to ourselves that our "life expectancy" is longer than that of any ancient Greek. This is nonsense. Any Greek expected to live as long as anyone does today. The fact that he didn't was another matter entirely. This is so much a part of the funny language of advertising, particularly that for life insurance companies. If I may interpolate here, as a professional student of propaganda, that for a successful example of propaganda, you needn't look further than to the advertising of life insurance companies. They have blackmailed four generations of men in America into thinking that they are not doing right by their children unless they kill themselves to provide for the future.

Now, Socrates is building an ideal, that is, a fictitious state, as he is speaking about this particular notion of health. And you see that it would be immoral to bring up, or attempt to bring up the physically or mentally unsound because it is unnatural in his estimation. This is long, long before Darwinism--not Darwin, as you know. Darwin never said the things about a law of survival of the fittest amid brute struggle, for which Spencerianism would be better attribution. But it is important to recognize that in *Republic*, Socrates presents the notion of abandonment of the unhealthy without any special weight or sense of innovation. This was common practice in Greece, as in societies closer to what may be called natural condition, in the ancient world and the not-so-ancient world, generally speaking. Now here some of you may counter with the point that "learning disabilities" as a term is not applied to cases of the egregiously "abnormal", for which there are other terms, and that it is in these cases that there may properly be worry about whether it is just or normal or expend the effort needed in preserving their lives and in bringing them up. But you see, the matter of definitions inescapably involves such decisions as to what are standards or "normalcy", "near normalcy", "near, near normalcy" and so forth and so forth and so on farther and farther until some end is reached; not the *hopeless*, because many of you would not even agree to that. Perhaps the dead would be the end?

Now, to bring up the Greeks and their practices is to point to an obvious and crucial--obvious, *but* crucial, I should say--historical consideration. That is, that the distinctions involved in the process of definition that we are discussing change from time to time and place to place. And so the decisions and all their meanings that are involved in individual lives in the complex of society inevitably change from time to time and place to place. For example, sometimes the quote "deficient" are considered sacrosanct, as if they are miraculously gifted. In such cases there are no notions of special education, but many notions of special treatment, of course. They become priests, kings, etcetera. Now, in this light, we may raise a set of questions about distinctions or diagnoses of "deficits" or "disabilities". How many of these are conditions that have always been present or characteristic of a goodly sample of humanity, although only recently recognized or described according to modern techniques? How many are new, occurring in new circumstances of education, affected by new media of teaching and the demands of these media, defined by changing notions about what is adequacy or competence--or potentiality?

Pointing to what are called the "media", allows me to enter the essential and until recently very largely neglected consideration of the educational forces beyond the school. When I first began giving my courses at Teachers College (familiarly known as "Dworkin's Prejudices I", given in the Fall and "Dworkin's Prejudices II", given in the Spring), it was quite radical in that place to be hammering a point which is, in fact, quite classical--completely Socratic--that the fundamental educational institutions of the society include the schools, that's all. The major educational forces precede the schools, envelop the schools, attack the schools, swallow the schools, depending upon the moment of history you're looking at. One doesn't have to proclaim this any more. Everybody is breathlessly on the bandwagon of the media. Now, in fact, it may be swinging or rolling too far in the other direction until for some, only television is important. The schools are no longer important.

Jacques Barzun mentioned recently a letter written to a newspaper by a student who said that he doesn't read any more; he simply doesn't bother, but just goes to movies and lets them "slop all over him." As you see, all learning does not occur in the schools. This is one of the things I was saying, again, in the talk at Rochester referred to earlier, before a group that included a great many media specialists. Learning has never occurred only in schools. This fundamental and obvious truism is itself not easily learned, despite the fact that it was recognized in the very beginnings of systematic discourse about education. As a matter of fact, schoolmasters may be the slowest of all to see or accept the limitations of schools--except, perhaps, at certain moments when the schools are under attack and are accused of causing or abetting whatever is wrong with the young in particular and society in general. Then, to be sure, it is an indignant public that reminds teachers, in what may be called the "subrogative mode of crisis logic", that the teachers have an omnipotence over learning that they have never enjoyed. But, you know, in doing so, laymen only have to refer to what have passed for histories of education among educationists, which almost invariably have described only the schools of people and their formal curricula. Now, in doing so, acceptance and authority may be gained for these works among schoolmasters and teachers of schoolmasters, but at an immense cost of the limitation of relevance of the study of education, that has played its part in that absurd and deadly separation of the serious consideration of thinking about teaching and learning from other areas of study. Not very long ago, 120th Street in Manhattan used to be called the widest street in the world. It may still be pretty wide although there are now all kinds of bridges. And sometimes some of us at Teachers College feel as if we want to fill the space with water and make a drawbridge so that a lot of what's going on across the street won't come over.

Now, does this pointing to the media suggest that there may be ambiguities in notions of learning deficits that are measured according to notions of school ability? Or that, perhaps, to raise another question, some deficits are being created or fostered by the media or institutions of informal education? Or, to raise another question, that the schoolmasters may be in danger, under many pressures, of adopting standards (according to which "deficits" are denoted) which are demanded by curricular forces (that is, the media, the informal forces) that do not have the moral, professional and *humane* standards to which teachers at least aspire, in order to bring the population up to certain levels so that they can appreciate "culture": that is, be responsive to advertising and progaganda?

As I've been speaking, many of you may have thought *of* an analogy to problems of the recognition of diseases in medicine, involving questions as to how many of those that are newly described are actually new, and how many others are clearly new, developing out of new conditions of life, engendered by man himself as he changes the environment, affecting the order of nature from the microscopic to macrocosmic levels. You know this is a serious concern, for example, in trying to define--to *define* cancer! Is "cancer" a matter of definition? I've heard arguments that some so-called "cancers" may actually be processes of mutation going on. Now, the questions we are talking about are perpetual: the questions of how many of the conditions we refer to as "deficits" have always been with us, how many are new, etcetera. Such questions are perpetual; they continually recur. For example, when fewer people received any formal education, and when the latter was only minimal, the recognition of "deficits" could be much easier, and also not so "fine" as in our day. In recognizing the problem of definition as one of clarifying relationships, it may be suspected that what is intended by the term "disabilities" contains a notion of *potentialities* and that this is what we're really talking about. And the idea of potentiality--and potentiality is an idea--changes as new orders of men gain power over the educational forces and the institutions of society. We may be talking about the specification of the meaning of "equality", and this discussion, I know I needn't emphasize, is part of the very crisis of our epoch, particularly in the United States at this moment.

The most profound questions of the philosophy and politics of education converge at the point of the assertion of the nature of man as being either fixed or dynamic. In fact, it is possible to most clearly characterize the disjunction of modern education and whatever went before--"ancient", "classical", "older", or whatever term you want to use--in pointing to the arrival of ideas that man's nature is infinitely perfectable via the agency of education. This new, quintessentially modern belief in the limitless potentialities of education is fully articulated by the time of Helvétius and Rousseau, as you recall, particularly by Helvétius. All things that used to be called sinful or deficient in man are correctable. Education, more education, and more education is all that is needed. And that, of course, calls for a social transformation, if not, more properly, for revolution. For one thing, the fundamental purpose of the state becomes transformed to an educational function; not simply to govern, not simply to referee between the various estates or classes that are at each other's throats, but to create the conditions within which teaching and learning can take place: that is, to create the curriculum in order that the individual citizen can reach his fulfillment. All men may *become* equal via the agencies of education, via the extension of opportunities for learning.

Now this contrasts radically, as you know, with classical views of basic inequalities among men that are still so deeply with us, that are built into so many of our institutions, and that, by the way, have more than a small amount of wisdom in their favor. It is when these ideas become institutionalized that they become menaces and dangerous and are the chains that we must eternally throw off. We are considering the view, classically stated by Plato and Aristotle, of the differences among men.

Men are different in their capabilities. They are not potentially equal. They are actually different--naturally different. There is, in this view, what I might call an isomorphism, an isomorphic structure of the three kinds of man in society. You remember the model in Plato and Aristotle. In the aspect of the state, the men of the viscera, the mass; the men of the heart, of the courageous spirit; the men of the intellect, the smallest group of all. And in the aspect of the individual, the man dominated, driven by, governed by his appetities; the man governed by his venturesomeness, his inquisitiveness, his exploration, his bravery, his pragmatism; and at the top the man governed by intellect, by reasoning, by the search after wisdom. This order sets the problem of governance in the society, and in a sense peculiar to the Greeks, for whom the distinction of society and citizen was not what we understand it to be today. For example, they would not have understood a phrase such as "church and state", or "the separation of church and state." In the classical view, the problem of governance is analogous in the individual and in the state. The goal or end is justice: the achievement of right rule. The condition of tyranny or injustice arises when a lower order of the psyche in the individual and of the body politic in the collectivity asserts the role of power over the higher. This idea of order becomes a dominant element in the three major religions of the West, following Plato and Aristotle, particularly Aristotle, as they came into religious philosophy, as you know: in Judaism via Maimonides; in Islam, and perhaps most clearly stated in Islam by Ibn Rochd-or Averroës; and in Christianity, of course, by St. Thomas Aquinas.

These divisions of the psyche that were isomorphically divisions in the society determined what had to be the actual curriculum for the society as well as for the individual. You recall that certain things had to be taught via myths, legends, stories, parables to the lower orders. It was here that Plato has Socrates, in Republic, offer the first systematic statement of the enterprise of propaganda in saying that a certain part of the population has to be told fictions, that is, lies; but they must be told therapeutic lies. And so, only the responsible educators, the guardians will be permitted to tell fictions. The artists, the poets, who are not guardians, must be prohibited from doing their teaching in the ideal state. The second division, the men of spirit, have to be shown proof of what they need to believe. They have to be given rewards. It has to be proven to them that virtue works in the world. Do good and you'll make it: that's how you have to talk to them to get them on your side--both in the individual person and in society. As for the last, highest division, the men of intellect, the philosophers, they, of course, will seek the good and practice virtue for its own sake because it is intellectually consistent and not for any rewards, and certainly not because they have been inveigled by some cute story. Now, among the factors of revolution that develop out of what we term the "Enlightenment" and the "Reformation", none is more decisive in altering the very structure of society than the idea that man's nature can be changed by education, especially when this becomes associated with the explosion of population that accompanies the industrialization of society, and the rise of new masses of population to political and cultural power. I am just putting these things out before you--these considerations that you know so well--in order to have them in the open together so that you can see them as we focus on the particular questions under discussion here.

Now, the professional definition of "deficits"--the definition according to professional standards and purposes--may have to be articulated in practice in opposition to the political definition, according to the demands of the body politic of that time. At least, I would say that a profession or a group of people seeking to become a profession (and a profession is always becoming--and may, in fact, be best considered in Aristotelian terms, as always becoming, and never arriving), the profession may have to, in many cases, at many points, take a stand against political definitions of "deficit", "normalcy", "learning disability", "potentiality". How to do this? We are talking, to be sure, of persuasion, of education--but also of guts, visceral fortitude. The questions of morality of the professional practices which Professor Kass raises, for example, whether to apply "drastic remedial procedures" to certain cases; what are the justifications, if there are any justifications; can there be any justifications?--all must refer to how the profession interprets its responsibilities, to itself, to the individual subjects, the patient or pupil, and to the public or publics to whom the profession feels responsible. They must refer to how the profession interprets its responsibilities, and how it defines its authority. And here we have to ask whether the public will stand for such tactics, and to recognize that you in the profession, as a profession, must prepare the public for such tactics, if you feel you have the right and responsibility. There may be a valid analogy here to medicine, as you know, to medical practice in general, and for particular example to surgery. Or are these instances essentially different? Will the public stand for such tactics? Can it be persuaded by education or propaganda to accept them on the grounds of confidence in expertise, and in professional concern for the welfare of pupils, for example?

Now, here it is worth remembering that in one aspect, teaching itself always involves choices, some quite radical choices. Think of the first experiences of the pupil in school, his very first experiences in the school environment. Everything that is happening is a revolution. Everything that is going on is so different from what has gone on before. And his introduction to school can be considered to involve tactics of teaching perhaps as violent--and dangerous--as some of those remedial procedures we are discussing. All thinking about teaching involves the answering of certain questions. The very first question of all about teaching, which is very relevant to our concerns here, which is very rarely asked by educational philosophers, even the best, is, in the form that we have asked before: "Why teach at all?" Once you answer that: "Yes, teach, for these reasons", then you come to decide to teach this rather than that, to teach something, rather than something else. Teaching is a commitment to an order of virtue. Socrates saw this in his opposition to the first professional teachers who arose in the ancient world. The first men who taught for pay, defined and denoted themselves as teachers because they had something that they could sell, that they could convince a public was needed. And their advertising was damned good. The fees paid, by the way, to some of these Sophists, were unquestionably some of the highest paid to teachers in the history of man. Gorgias, for example, if we know anything about the exchange value of the Greek talent of gold, was receiving something like $30,000. or $40,000. a week per pupil--from very rich pupils, of course. And he was guaranteeing them a very successful outcome. You know his great brag, which it seems he could prove, that he could teach the ways of arguing on any side of any argument so that one could win. One reason he could do that, you see, which is what Socrates was opposing, was that he really believed that any side of any argument had no more merit than any other. But Socrates is a teacher. Disagree with his epistemology or with this or that about his philosophizing; but with the sense of vocation, no. "Teaching" he says, (in paraphrase), "is a sacred work." And this is what it is. You choose to teach one thing rather than another and here before you is a vulnerable, malleable subject. What more do you need to realize that this is a situation of moral responsibility forever?

Now, teaching involves choices, as I say, on the one hand discussing the extremity of the tactics that may need to be used for remedial purposes. Teaching involves choices that are radical in any case. In a sense, these choices are always imposed on the pupil. In a sense, the pupil's liberty can be said to be violated *if* he has any right to remain ignorant and unformed. Here is a philosophical question of intricate difficulty, a beautiful problem for a beginning class in educational philosophy. Beautiful. Does the pupil have any rights not to learn? In a sense the teacher's choices of *this*, rather than *that* are imposed, but of course--to state the commonplaces--only after commitment to superior expertise and to state authority, among other things.

These considerations must be raised, on the one hand of the issue of extremity, in asking questions about drastic remedial procedures. But on the other hand there is another professional point to make, also made by Socrates, but made most strongly by another school of thinkers all-too-rarely included when considering pre-Socratic philosophy. These are the Hippocratics, after Hippocrates of Cos--who actually existed even though much of the writings attributed to him are what we call pious forgeries. This term is used not in denigration. Even today, followers of a man in admiration, in celebration of his life and work, will attribute to him whatever writings or creations they may bring out. And you know, (to go on with this aside), for generations there was a tremendous controversy, which is still continuing, over what was actually written by Plato and Aristotle. And need I bring up the problem of establishing what is supposed to have been said by Jesus? Jefferson published an edition of the *Bible*, which was composed, as he claimed after great laborious study, of the words actually uttered by Jesus himself.

A great problem, the pious forgeries! And one of the best examples can guide us back to our discussion. The responsibilities of this profession sets limits on what can or cannot be done in all conscience and humanity. Here we may remember a very great Hippocratic statement, at least equal in importance, I think, to the famous oath. Ah, if only physicians would follow it! This is one of the fragments traditionally attributed to Hippocrates, but most probably a later "forgery"--and a very pious one. He says, "First, do not harm"--meaning: in prescribing, in giving treatment, first do no harm. Extend this to teaching. First, do no harm. I think one can carry this forward to be as good a rule for one's own conduct in life as can be found. All the harm in the world is done by people doing something for the good of other people. Do you know anybody who ever does anything bad but that he's not purportedly doing some good for somebody,--not to mention himself? Never, never, never. This is the devil, you see.

This Hippocratic notion for physicians, this classic professional notion, is raised at a time only a short while before Socrates is speaking and Plato is writing, stating a code for teaching in terms of a profession. Socrates, as you know, is a pivotal figure in the history of Western thought, because after him philosophy takes a moral turn. Before that time speculation was out of a kind of primitively scientific curiosity about the world, or concerned with elaborate mystical fictions about worlds that had been, or were to come. Socrates begins to talk about what is the good life and what a man must do to live it. And so, too, the Hippocratics, the physicians, are saying that to be a professional, to claim to be a healer, first means that you are a healer, not a killer. You don't cut off legs gratuitously; you don't cut into healthy tissue--all of the things that are in the oath that is so erratically obeyed by the medical profession today.

Now this leads to so many questions we must raise in so many contexts in a society more and more committed to education as meliorative if not actually salvationary. Here, I would like to raise again, in slightly different form, a couple of the considerations that were raised in the address on "visual literacy" mentioned earlier, which was also a questioning of the meanings of terms, but a much more bitter, polemical one, believe me. For one thing, there we were in the middle of Kodak Country, as I said, building up a tremendous juggernaut that was going to sell a hell of a lot of Kodak materials. How transparent, to follow the metaphor; how sickening, really! And so many of the educators were so--for one thing--greedy for any kind of help, any kind of materials, that they were willing to take on everything in order to get whatever would come off the new bandwagon. I have to be careful, you see. The most innocent milkmaid's reputation is likely to suffer if her only trade is with a whorehouse.

I would like to reraise those considerations by way of saying again that to ask all the questions about "deficits" and "disabilities" is again to be bringing up the fundamental questions of educational philosophy. Why teach at all? Who is to teach? Who is to be taught? For what purpose? All of these questions, not necessarily in that sequence, although the first question is always implicitly first. Why teach at all? And to ask that in considering this enormous enterprise, this tremendous focusing of effort of individual commitment and concern--if not charisma, true vocation of dedicated people who care about particular pupils who have difficulties that they can see and want to do something about. To ask, "To what end? To what end? To what end?" It must be to some end of worthy purpose, to the end of some good thought about the future of man; some hope for these children; something better than simply to be integers in a society of conformity for which they have been so laboriously trained; or to rise beyond being what Bernard Farber is calling in his book on Mental Retardation, just out, "members of a surplus population trying to become part of the actual populations." There must be some notion that all the effort not be only ideological, on the part of the powers, whoever they may be, preparing people for more and more sophisticated forms of indoctrination, using all the armament of modern science and technology, backed by all the prestige of learning. Think of what we're doing in the schools: so immense an effort to make youngsters versed in the skills by which they can be enslaved. This mustn't be. Only a group with a notion of itself as profession can fight this. Maybe a losing battle. But it's a losing battle worth fighting--and perhaps, even worth losing.

And then again to put that other caution I was raising at Rochester: that in training the individual to higher and higher levels of experiential response, of capability of higher and higher intensities of response--that this must be in the direction of some notion of the integration of self that is whole, that is wholesome, that is spiritually integral--and not simply to be heightening and heightening and heightening sensibilities, providing occasions and occasions for higher and higher and more intensive learning experiences without any notion about what man is supposed to do with them. A profession can define this. It can define it first of all by making it happen. And perhaps second of all by writing it down in words, engraving it in stone, chiseling it on Mt. Rushmore or something like that. Advertising it, you see, after first practicing it.

And here I have to leave you with a confession. I teach teachers; I care deeply about this. But I don't believe teaching can be taught. You can do only two things, it seems to me, in education as a teacher, and also as a parent, in the place and function of teacher. First, is profession. First, you can state and argue, offer your persuasion for distinction of the good versus evil, excellence versus drab, beauty versus ugliness--all the distinctions of quality. That's the first thing you can do. Second, you can set the best example you can. Anything else that you try usually and ultimately involves force. And I don't only mean the initial force in the classroom with a recalcitrant pupil whom you are coercing to learn for his own good. That has a certain tactical validity as you've heard me argue. But ultimately anything other than profession and example means bayonets; it means imposing your will upon, not necessarily the unwilling, but the unconscious, the inhuman or what Socrates would call the subhuman. This is a confession. I leave this with you.

EPILOGUE

Currently, the field of learning disabilities has reached a crucial point, both in the synthesis of philosophies basic to learning disability programs, and in the development of teacher standards and qualifications. The Institute group reports presented leadership discussions on 1) specific roles and functions of teachers, and 2) implications for preparing such personnel.

These reports are not to be construed as final products for immediate implementation. The process of defining minimum standards and qualifications of personnel in learning disabilities has just begun. It is not possible to interpret the group reports in a "product" sense of the word. Rather, they take on significance when examined along a process continuum.

Process is to be distinguished from product in the formal organization of a body of knowledge. The body of knowledge in the area of learning disabilities is being established and new knowledge must be incorporated into the existing organization of what is known. Process involves active change over time, and must include continuous application of old and new knowledge.

While the major purpose of the Advanced Institute was to provide a forum for personnel description and training, an interesting side effect was the discovery of the extreme diversity of the participants. Each group worked from its divergence of knowledge toward convergence in each report. In order to emphasize the distinctive features of each report, "mini-abstracts" are presented in the following paragraphs.

1. Adelman's group summarized the issues raised by its members in their pre-institute working papers, and then concentrated more on broad, conceptual views than on "practical" problems, specifying practical implications only where possible. Their discussion led to agreement on the population of children actually being served and a description of three subgroups within that population. Evaluation of training programs was emphasized and ideas for data collection were given. A brief report on a presentation of this group's report at the 1970 ACLD convention was given by the chairman.

2. Chalfant's group emphasized the importance in determining the need for personnel and suggested that this be done through joint planning by several state institutions. Problems often center around administrative issues and professional role conflicts. A redefinition of services was presented with respect to type of administrative placement, area of professional responsibility, and service agencies. This group described levels of teacher preparation ranging from the para-professional through an advanced certificate program from which would emerge diagnostic-teachers. A method for developing independence in teacher trainees was presented. Unique to this report was a listing of factors to be considered

by an institution of higher learning before initiating a training program in learning disabilities.

3. Ensminger's group presented administrative arrangements (special class, resource room, etc.), and teacher titles and roles (diagnostic teacher, resource teacher). Diagnostic skills and teacher techniques were also emphasized. Quality controls, research responsibilities, and leadership roles were emphasized as future concerns.

4. McCarthy's group first prepared a delineation of basic issues from the working papers sent in advance by the participants. This group presented a teaching model for the MA level specialist, specifying both the competencies of the teacher and the analysis of the learner. A more complete breakdown was presented under the three areas of skills, knowledges, and experiences. A conceptual framework was discussed and implications were stated in a series of pragmatic statements.

5. McGrady's group emphasized the "total context" in which learning disabilities occurs and considered interdisciplinary factors within the broad educational perspective as well as in relation to other handicaps. The clinical versus educational dichotomy was also brought out and it was noted that the teacher of learning disabilities brings the clinic to the school. It was stressed that training programs should be laboratory experiences concurrent with course work.

6. Ridgway's group discussed three categories of learning problems, delineated some roles of various personnel, and outlined a set of competencies which should be taught in a university program. Special focus was on practicums and its relationship to theory. Implementation of a program in the schools would result in a variety of possibilities.

7. Scheffelin's group discussed specific and general functions of the learning disability teacher; time phases and locus of training requirements in conjunction with description of terminal competencies; and the means of developing teacher competencies and evaluation criteria. Theoretical emphases in the field along with trends having implications for training programs were followed by a discussion of perceived needs for the field of learning disabilities. Issues raised in the learning disability field before and during the Institute as emphasized by Scheffelin's group included philosophy, dissemination, training, service, and research.

Following this Institute, legislation for learning disabilities was enacted ("Children with Specific Learning Disabilities Act of 1969"). Federal monies are now becoming available for research, training, and model centers. Specifically, the legislation calls for programs of--

> "(1) research and related activities, surveys, and demonstrations relating to the education of children with specific learning disabilities;
>
> "(2) professional or advanced training for educational personnel who are teaching, or preparing to be teachers of, children with specific learning disabilities, or such training for persons who are, or preparing to be, supervisors and teachers of such personnel; and

> "(3) establishing and operating model centers for the improvement of education of children with specific learning disabilities, which centers shall (A) provide testing and educational evaluation to identify children with specific learning disabilities who have been referred to such centers, (B) develop and conduct model programs designed to meet the special education needs of such children, and (C) assist appropriate educational agencies, organizations, and institutions in making such model programs available to other children with specific learning disabilities."

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This report has been presented as a tribute to the Institute participants as evidence of their continuing faith in learning disabilities as their professional field. The developmental process has begun and the tasks which lie ahead are many. More Institutes are needed, much research must be initiated, an increase of programs is necessary, job descriptions remain to be written, more leadership personnel is demanded, theoretical positions must be elaborated--in short, much work needs to be done.